**Wendi Hannah Weimar**

School of Kinesiology Auburn University

*Present Rank:* Associate Professor *College:* Education

*Years at Auburn:* 17 years *Pay basis:* 9 months

*Graduate Faculty Status Granted:* 2004 *Type of Appointment:* Tenured

*Service elsewhere:* Five years at Colonie Central High School, Albany, NY (physics and chemistry teacher)

# Education

PhD, Auburn University, 1999.

Major: Exercise Science-Biomechanics

Dissertation/Thesis Title: The Influence of the Coriolis Effect on the Joint Dynamics of a Martial Art Front Kick

MEd, University of Virginia, 1991.

Major: Adapted Physical Education Supporting Areas of Emphasis: Biomechanics

Dissertation/Thesis Title: The Effects of Modeling on the Performance of a Non-Learning Motor Task

BS, Castleton State College, 1989.

Dual Major: Secondary Education and Physics & Chemistry

|  |  |
| --- | --- |
| *Professional Experience:* |  |
| Auburn University | Full Professor | 2014-present |
| Auburn University | Associate Professor | 2005-present |
| Auburn University | Assistant Professor | 1999-2005 |
| Auburn University | Doctoral Student | 1997-1999 |
| Colonie Central High School | Science Teacher | 1991-1996 |
| Union College | Asst. Field Hockey Coach | 1992-1996 |

Joint Appointment – Auburn University Mechanical Engineering 2014-present

*Percentage breakdown for the allocation of time and effort:*

60% Teaching, 30% Research, 10% Outreach/Service (1999-Present)

# Licensures and Certifications

Certified Dartfish Technician. (June 2010 - Present)

At-Scene Traffic Crash/Traffic Homicide Investigation 2003 Advanced Traffic Accident Investigation 2003

Accident reconstruction courses were to serve as the basis for the biomechanical behavior of bodies during crashes. This was to aid in the use of real world experiences for my students and as support for my work as a professional witness.

New York State Teaching Certifications: Physics, Chemistry, Mathematics, Theatre Arts, Physical Education (1991)

# Honors and Awards

Outstanding Graduate Mentor, Graduate School, Auburn University (2011)

In recognition of excellence, innovation and effectiveness in mentoring graduate students for their professional and personal development.

Emily and Gerald Leischuck Outstanding Graduate Faculty Teaching Award, College of Education (2009)

For outstanding contribution to the teaching of graduate students

OCMMIE Award, Office of Communications and Mass Marketing (2009)

For the most widely publicized research and the project that brought the most positive publicity to Auburn University

Who’s Who Among America's Teachers, Who's Who (2005) Nominated by students to the national organization

Who’s Who Among America’s Teachers, Who's Who (2004) Nominated by students to the national organization

Who's Who Among America's Teachers, Who's Who (2003) Nominated by students to the national organization

Honorary Golden Key Member, Golden Key (2002)

The Golden Key is an academic honors association that recognizes the top achieving juniors and seniors in all academic fields. Periodically they induct faculty members (on an honorary basis) who have been nominated by the students and who have supported the development of students

Inducted into Phi Kappa Phi, Phi Kappa Phi (1999)

The Honor Society of Phi Kappa Phi is the oldest and most selective academic honor society dedicated to the recognition and promotion of academic excellence in all fields of higher education.

# Statement of Purpose

The mission of the Kinesiology program at Auburn University is to promote the creation and application of knowledge about physical activity and performance, create and implement an invigorating learning environment for undergraduate and graduate students, and improve the health and wellness of society through research, outreach, and teaching. Providing the biomechanical view of this mission, I have created a solid research environment that provides me and my students the opportunity to formulate and answer robust, interesting and valuable questions. In addition, we provide movement analyses and foster technology development.

### Research:

**Books**

Wilburn, C., Weimar, W. & Decoux, B. (2021). Basic Biomechanics for the Pre-

Clinician and Practitioners. Great River Publications.

Hamilton, N., Weimar, W., Luttgens, K. (2011). *Kinesiology: Scientific basis of human motion*

(12th ed.). New York City, NY: McGraw Hill.

At last report, this is the third most popular Kinesiology book on the market.

Hamilton, N., Weimar, W., Luttgens, K. (2007). *Kinesiology: Scientific basis of human motion*

(11th ed.,). New York City, NY: McGraw Hill.

Refereed Journal Articles

\*indicates students

Lead author takes responsibility for manuscript preparation for publication. In addition, the lead author often takes responsibility for handling further correspondence related to the publication. Others listed have provided substantial and indispensable roles in the development, conduct, and completion of the project and manuscript. In some instances, the last author is the advisor and/or lab director, and may be the person responsible for further correspondence.

Zetterstrom, S.M\*., Boone, L.H., Farag, R., Weimar, W.H., Caldwell, F.J. (2022). Effect of

single and double hemitenotomy on equine deep flexor tendon length and strength in

experimental load challenges. Veterinary Surgery, 18 April,

2022.   https://doi.org/10.1111/vsu.13808

Parks, AG, Murrah, WH, Weimar, WH, McHenry, PA, Bigham,D, Giordano, K, Sefton, JM

(2022). Impact of two types of fitness programs on soldier physical fitness. International Journal of Exercise Science 15(4).

 Jagodinsky, A.E., Angles, R., Wilburn, C. & Weimar, W.H. (2021). Lower extremity

motor synergies in individuals with and without chronic ankle instability.

Journal of Applied Biomechanics. Sept 15: pp 1-7. doi: 10.1123/jab.2019-

0398

 Jagodinsky, A.E., Wilburn, C, Moore, N., Fox, J.W. & Weimar, W.H. (2020). Ankle

bracing alters coordination and coordination variability in individuals with and

without chronic ankle instability. Journal of Sport Rehabilitation. 3(1): 62-69.

doi: 10.1123/jsr.2019-0380.PMID: 32131049

Weimar, W., Sumner, A., Romer, B., Rehm, J., Decoux, B., & Patel, J. (2019). Kinetic

analysis of swimming flip-turn push-off techniques. *Sports,* 7(2),

doi.org/10.3390/sports/7020032.

Oliver, G.D., Plummer, H.A., Washington, J.K., Weimar, W.H., Brambeck, A. (2019).

Effects of game performance on softball pitchers and catchers. *The Journal of*

*Strength and Conditioning Research*, 33(2), 466-473. doin.org/10.1519/jsc.

000000000001848.

Romer, B., Weimar, W. & Fox, J. (2019). Phase ratios of American collegiate triple

jumpers. *Journal of Physical Education and Sport*: 93, 645-651.

doi:10.7752/jpes.2019.01093.

Romer, B.H., Weimar, W.H. & Fox, J. (2019). Footwear alters lower extremity

coordination variability. *Perceptual and Motor Skills*.

doi.org/10.1177/0031512519863183.

Rehm, J.M., Jagodinsky, A.E., Wilburn, C.M., Smallwood, L.L., Windham, J.B., Weimar,

W.H. (2019). Measuring trunk stability for wheelchair basketball classification:

A new field test. *Clinical Kinesiology*. 73(1), 1-7.

Romer, B, Fox, J., & Weimar, W. (2018). Dual-task effect on lower extremity gait

coordination during barefoot & shod walking. *Translational Sports Medicine*.

doi.org/10.1002/tsm2.42.

Games, K.E., Lakin, J.M., Quindry, J.C., Weimar, W.H., Sefton, J.M. (2018). Local

pressure application effects on neurological and circulatory function. *Aerospace Medicine and Human Performance*: 89 (8), 693-699. doi.org/10.3357/AMHP.4675.2018.

Price, S., Williams, R.H., Wilburn, C., Williams, P., Wadsworth, D., Weimar, W., Russell,

J. & Rudisill, M.E. (2017). Promoting diversity and inclusion: Developing partnerships between historically black colleges and universities and predominately white institutions. Kinesiology Review. 6(4), 368-374. doi.org/10.1123/kr.2017-0037.

Games, K.E., Lakin, J.M., Quindry, J.C., Weimar, W.H., & Sefton, J.M. (2016). Local pressure application effects on discomfort, temperature and limb oxygenation. *Aerospace Medicine and Human Performance* 87(8), pp.697-703.

Kephart, W.C., Mumford, P.W., McCloskey, A.E., Holland, A.M., Shake, J.J., Mobley, C.B., Jagodinsky, A.E., Weimar, W.H., Oliver, G.D., Young, K.C., Moon, J.R. & Roberts, M.D. (2016). Post-exercise branched chain amino acid supplementation does not affect recovery markers following three consecutive high intensity resistance training bouts compared to carbohydrate supplementation. *Journal of International Society of Sports Nutrition* 13 (30), pp.1-10.

Iso-Ahola, S.E., Dotson, C.O., Jagodinsky, A.E., Smallwood, L.L., Wilburn C.M., Weimar, W.H., & Miller, M.W. (2016). Improving performance by anchoring movement and “nerves”. *Human Movement Science* 49, pp.239-247.

Oliver, G.D., & Weimar, W.H., (2016). Hip and shoulder range of motion in youth baseball pitchers. *Journal of Strength and Conditioning Research* 30(10), pp.2823-2827.

Oliver, G.D., Weimar, W.H., & Henning, L.E. (2016). Effects of a simulated game on muscle activation in youth baseball pitchers. *Journal of Strength and Conditioning Research* 30(2), pp.415-420.

Oliver, G.D. & Weimar, W.H. (2015). Scapula kinematics of youth baseball players. *Journal of Human Kinetics* 49, pp.47-54.

Oliver, G.D., Stone, A.J., Weimar, W.H., Lemak, L., Washington, J.K., & Dougherty, C.P. (2015). Upper extremity muscle activation during bodyblade exercises following six weeks of intervention focusing on the lumbopelvic-hip complex. *Sports* 3(3), pp. 188-201.

McMaster, M.A., Munsterman, A.S., Weimar, W.H., Barrett, E.J., Hanson, R.R. (2015). *Ex- vivo* evaluation of a modified Teno Fix® device repair pattern versus a 3-loop pulley for repair of equine flexor tendons. *Veterinary Surgery* 44(7), pp. 803-808.

Games, K.E., Lakin, J.M., Quindry, J.C., Weimar, W.H., & Sefton, J.M. (2015).

Prolonged restricted sitting effects in UH-60 Helicopters. *Aerospace*

*Medicine and Human Performance* 86(1), pp.34-40.

Oliver, G.D., Weimar, W.H. & Plummer, H.A., (2015). Gluteus medius and scapula muscle activations in youth baseball pitchers. *Journal of Strength and Conditioning Research* 29(6), pp.1494-1499.

Oliver, G.D., Weimar, W.H. & Henning, L.E., (2015). Effects of a simulated game on muscle activation in youth baseball pitchers. *Journal of Strength and Conditioning Research* Pub online Aug 24, 2015.

Jagodinsky, A., Fox, J., Decoux, B., Weimar, W. & Liu, W., (2015). Biomechanical comparison of frontal plane knee joint moment arms during normal and Tai Chi walking. *Journal of Physical Therapy Science* 27(9), pp. 2959-2961.Wade, C., Davis, J. & Weimar, W.H. (2014). Balance and exposure to an elevated sloped surface. *Gait and Posture* 39(1), pp. 599-605.

Oliver, G.D. & Weimar, W. (2014). Hip and shoulder range of motion in youth baseball

players. *Journal of Strength and Conditioning Research* (in press).

Oliver, G.D. & Weimar, W.H. (2014). Hip range of motion and scapula position in youth baseball pitching pre and post simulated game. *Journal of Sport Science* 20, pp. 1-7.

Weimar, W. & Shroyer, J.\* (2013). Arch height index normative values of

college-aged women using the arch height index measurement system.

*Journal of American Podiatric Medical Association* 103(3), pp. 213-217.

This article was featured on MDLinx.

Knight, A.C. & Weimar, W.H. (2013). Difference in ratio of evertor to invertor activity

between the dominant and nondominant legs during simulated ankle sprain.

*Journal of Sport Rehabilitation* 22(4). 272-278.

Knight, A. C.\* & Weimar, W. (2012). Development of a fulcrum methodology to replicate the lateral ankle sprain mechanism and measure dynamic inversion. *Sport Biomechanics* 11(3), pp.402-413.

Knight, A. C.\*, & Weimar, W. (2012). Effects of ankle taping and previous injury on the latency of the peroneus longus. S*port Biomechanics* 11(1), pp. 48-56.

Knight, A. C.\* & Weimar, W. (2012). Effects of inversion perturbation after step down task on the latency of the peroneus longus and peroneus brevis. *Journal of Applied Biomechanics* 27, pp. 283-290.

Angle, T.C.\*, Gillette, R., & Weimar, W.H. (2012). Kinematic analysis of maximal movement initiation in Greyhounds. *Australian Veterinary Journal* 90(3), pp. 60-68.

Angle, T.C.\*, Gillette, R., & Weimar, W.H. (2012). Caudal displacement during movement initiation and its implications for possible injury mechanisms. *Veterinary & Comparative Orthopaedics and Traumatology* 25(5), pp. 397-401.

Weimar, W., Martin, E. V. & Wall, S. (2011). Kindergarten students’ movement responses to cues and modeling. *Physical Education and Sport Pedagogy*, 16(3), pp. 213-222.

Robinson, L., Rudisill, M., Weimar, W., Shroyer, J. F.\*, Breslin, C. M.\*, Morera, M.\* (2011). Footwear and locomotor skill performance in preschoolers. *Perceptual and Motor Skills*, 113(2) pp. 534-538.

Knight, A. C.\* & Weimar, W. (2011). Difference in response latency of the peroneus

longus between the dominant and non-dominant leg. *Journal of Sport Rehabilitation*,

20(3), pp.321-332.

Knight, A. C.\* & Weimar, W. (2011). Effects of ankle taping on single and double leg

balance. *Sport Science Review, 19*, pp. 5-19.

Urbin, M. A.\*, Stodden, D. F., Fischman, M., Weimar, W. (2011). Impulse-variability theory: Implications for ballistic, multi-joint motor skill performance. *Journal of Motor Behavior, 43*(3), pp. 275-283.

Shroyer, J.\* & Weimar, W. (2010). Comparative analysis of human gait while wearing flip-flops versus wearing sneakers. *Journal of American Podiatric Medical Association, 100(4)*, pp. 251-257.

Myers, L.J., Mueller, E. & Weimar, W. (2009). Reliability of operational detector dog handler teams and associated factors. *Journal of Veterinary Behavior: Clinical Applications and Research*, *4*(6), pp252.

Breslin, C. M., Garner, J. C.\*, Rudisill, M., Parish, L. E., St Onge, P. M., Campbell, B. J.\*, & Weimar, W. (2009). The influence of task constraints on the humeral lag of the overarm throw of novice throwers. *Research Quarterly in Exercise and Sport, 80*(2), pp. 375-379.

Garner, J. C.\*, Blackburn, T., Weimar, W., & Campbell, B. J.\* (2008). Comparison of electromyographic activity during an eccentrically loaded versus concentrically loaded isometric muscle contractions. *Journal of Electromyography and Kinesiology, 18*(3), pp. 466- 471.

Wade, C.\*, Davis, G., Marzilli, S., & Weimar, W. (2006). Information processing capacity while wearing personal protective eyewear. *Ergonomics, 49*(10), pp. 955-967.

Wade, L. C.\*, Weimar, W., & Davis, G. (2004). Effect of personal protective eyewear on postural stability. *Ergonomics, 47*(15), pp. 1614-1623.

Weimar, W. (2002). Computers and physical education. *Teaching Elementary Physical*

*Education*, 13 (6).

Weimar, W. (2001). Physical education and science. *Teaching Elementary Physical*

*Education,*12(3).

Weimar, W. (2001). Brain research. *Teaching Elementary Physical Education,*12(3).

Martin, E., Weimar, W., & Schnuelle, D. (1999). Respectful competition, movement activities, and technology. *Teaching Elementary Physical Education*,10(3).

Martin, E., Schnuelle, D. & Weimar, W. (1999). Benefits, behavior, and building the perfect program. *Teaching Elementary Physical Education*, 9(3).

Martin, E., Weimar, W. & Schnuelle, D. (1998). The internet, learning styles and appropriate practice. *Teaching Elementary Physical Education*. 9(4).

Martin, E., Weimar, W. & Schnuelle, D. (1998) Active youth and physical education in the next decade. *Teaching Elementary Physical Education*, Vol. 9 (5).

Martin, E., Weimar, W. & Schnuelle, D. (1998). Advice for parents, preservice teachers and others on a budget. *Teaching Elementary Physical Education*, Vol. 9 (6).

Hughes, C., Weimar, W., Sheth, P. P., Brubaker, C. (1992). Biomechanics of wheelchair propulsion as a function of seat position and user-to-chair interface. *Archives of Physical Medicine and Rehabilitation, 73*(3), pp. 263-269.

**Invited Contributions**

**Book Chapter:**

Hastie P, Miller M, Oliver GD, & Weimar W. (2014). Tameka: Curves. In K. Armour [Ed.]. *Pedagogical cases in sport, exercise and movement.* London UK: Rutledge.

**Manuscripts:**

Knight, A.C. & Weimar, W.H. (2012). Peroneal latency’s role in inversion ankle sprain. *Lower Extremity Review* 4(5), pp. 61-68.

Shroyer, J.F. & Weimar, W.H. (2010). Flip-flops: Fashionable but functionally flawed. *Lower Extremity Review* 2(9), 49-53.

**Phone Interviews:**

Stan Horaczek. (2020). Walking correctly takes work – here’s how to improve every step. Popular Science, May 22, 2020.

Jackson, Devon. (2014). Is gear a performance enhancing drug? *Outside Online. Gear Shed, Tech Talk.* May 22, 2014.

Dellzell, E. (2012). Lost in transition: Minimalist shoes don't always alter gait. *Lower Extremity Review,* 4(9), pp. 11-12.

**Presentation:**

Georgia Athletic Trainer’s Annual Conference (2013). Using Dartfish to analyze movement.

## Manuscripts in Review/Revision/Development

Weimar, W.H., Shroyer, J.F.\*, & Wade, L.\* The effect of various thong style flip-flops on dorsiflexion and tibialis anterior electromyography. *Gait and Posture.*

Weimar, W.H. The predictive nature of the Fibonacci Sequence on the overhand throw.

## Papers in Conference Proceedings

\*There are no page numbers for conferences starting in 2012, as the full program in only available online.

Weimar, W., Decoux, B.E, Williams, P.T. Fawcett, R.T. & Wilburn, C.M. Does arch height influence lateral jumping. (2021). American Society of Biomechanics Virtual

Romer, B, Weimar, W, Fox, J and Patel J. (2021). The effect of augmented plantar feedback

on walk ratios. 26th Annual Meeting of the GCMAS (virtual)

Weimar, W.H., Fox, J.W., Decoux, B.E., Wilburn, C.W. & Fleisig, G.S. (2020).

Proximal to distal sequence is predicted by the Fibonacci sequence. *44th*

*Annual Meeting of the American Society of Biomechanics,* Georgia Tech,

Atlanta, Ga.

 Wilburn, C.M., Decoux, B.E., Williams, P.T., Fawcett, R.T., & Weimar, W.H. (2020).

The effect of arch types on propulsive forces during jumping and hopping

tasks. *44th Annual Meeting of the American Society of Biomechanics,* Georgia

Tech, Atlanta, Ga.

Decoux, B.E., Wilburn, C.E. & Weimar, W.H. (2020). Inter-segmental coordination

variability during hopping and running on natural and synthetic turf surfaces.

*44th Annual Meeting of the American Society of Biomechanics,* Georgia Tech,

Atlanta, Ga.

Weimar, W., Decoux, B., Wilburn, C., Brewer, L. & Moore, N. (2018). It matters what

you curl, but not to the biceps brachii. *42nd Annual Meeting of the American Society of Biomechanics*, Rochester, MN.

Fox, J., Jagodinsky, A., Wilburn, C. & Weimar, W. (2018). Single-joint strength curves

from a multi-joint task. *42nd Annual Meeting of the American Society of*

*Biomechanics*, Rochester, MN.

Weimar, W.H., Washington, J., Decoux, B., Gascon, S. & Oliver, G. (2017). Does the

Fibonacci sequence predict segmental velocities of the overhand throw? *41st*

*Annual American Society of Biomechanics Meeting*, Boulder, CO.

Williams, P.T., Wilburn, C.M., Dupiton, M.E., Morris, M.A., Mcroy, J.E., Prince, S.L. &

Weimar, W.H. (2017). Foot morphology of school aged children in a

developmental research school. *41st Annual American Society of*

*Biomechanics Meeting*, Boulder, CO.

Fox, J., Patel, J., Romer, B, Rehm, J. & Weimar, W. (2017). Similarity of force

development and decline in the stretch-shorten cycle. *41st Annual American Society of Biomechanics Meeting*, Boulder, CO.

Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Wilburn, C.M., & Weimar, W.H.

(2015). Influence of self-induced drop on vertical jump performance. *39th Annual American Society of Biomechanics Meeting,* Columbus, OH.

Smallwood, L.L., Jagodinsky, A.E., Wilburn, C.M., & Weimar, W.H. (2015). Influence

of heel type on stride length. *39th Annual American Society of Biomechanics*

*Meeting,* Columbus, OH.

Jagodinsky, A.E., Wilburn, C.M., Smallwood, L.L. & Weimar, W.H. (2015). Fatigue

effects on lower extremity coordination and coordination variability during

multi-joint ballistic movement. *39th Annual American Society of*

*Biomechanics*. Columbus, OH.

Romer, B.H., Fox, J.W., Jagodinsky, A.E., Rehm, J.M. & Weimar, W.H. (2015).

Alterations in trunk-pelvis coordination during overground walking. *2015*

*Annual conference of Gait and Clinical Movement Analysis Society.*

Portland, OR.

Weimar, W.H. & Oliver, G.D. (2014). Single leg squat performance and pitch speed.

*7th World Congress of Biomechanics*, Boston, MA.

Romer, B.H. & Weimar, W.H. (2014). Influence of tactile feedback on stride length and

step width during normal walking. *2014 Annual conference of Gait and Clinical Movement Analysis Society.* University of Delaware.

Fox, J. Jagodinsky, A., Smallwood, L., Wilburn, C. & Weimar, W. (2014). Peak force

and vertical velocity in a novel countermovement. *7th World Congress of*

 *Biomechanics*, Boston, MA.

Jagondinsky, A. Fox, J. Weimar, W. & Liu, W. (2014). Medial moment arm

characteristics of Tai Chi walking compared to normal walking. *7th World*

*Congress of Biomechanics*, Boston, MA.

Romer, B.H., Fox, J.W., Jagodinsky, A.E., Rehm, J.M. & Weimar, W.H. (2014).

Footwear effect on pelvic-leg coordination during overground walking. *7th*

*World Congress of Biomechanics*, Boston, MA.

Weimar, W., Romer, B\*., Fox, J.\*, Patel, J.\*, & Rehm, J.\*, (2013). Cadence effects on

shod gait kinematics, *37th Annual American Society of Biomechanics Meeting*,

Omaha, NE.

Patel, J. H.\*, Jagodinsky, A. E.\*, Oliver G.D., & Weimar, W.H. (2013). The role of

pelvic girdle position in force development and electromyography of the Latissimus Dorsi. *37th Annual American Society of Biomechanics Meeting*, Omaha, NE.

Romer, B.\*, Fox, J.\*, Patel, J.\*, Rehm, J.\*, & Weimar, W. (2013). Fixed cadence effect on

shod & barefoot gait kinematics. *37th Annual American Society of Biomechanics Meeting*, Omaha, NE.

Jagodinsky, A.\*, Fox, J.\*, Rehm, J.\*, Romer, B.\*, Patel, J.\*, & Weimar, W. (2013). A comparison of electromyography from four loading configurations. *37th Annual American Society of Biomechanics Meeting*, Omaha, NE.

Romer, B.\*, Patel, J.\*, Fox, J.\*, Rehm, J.\*, & Weimar, W. (2013). Footwear and cadence effect on spatiotemporal and sagittal plane gait kinematics, *2013 Gait and Clinical Movement Analysis Society Annual Meeting*, Cincinnati, OH.

Weimar, W.H. & Campbell, B.J. (2012). Latissimus dorsi anthropometry and swimming. *36th Annual American Society of Biomechanics Meeting*, Gainesville, FL.

Romer, B.\*, Fox, J.\*, Patel, J.\*, Rehm, J.\* & Weimar, W. (2012). The effect of varying cadences on shod and barefoot gait kinematics. *36th Annual American Society of Biomechanics Meeting*, Gainesville, FL.

Patel, J.\*, Sumner, A.\*, Fox, J.\*, Romer, B.\*, Rehm, J.\*, Campbell, B. & Weimar, W. (2012). The role of the latissimus dorsi muscle in pelvic girdle and trunk rotations. *36th Annual American Society of Biomechanics Meeting*, Gainesville, FL.

Romer, B.\*, Fox, J.\*, Patel, J.\*, Rehm, J.\*, Shroyer, J., & Weimar, W. (2012). Influence of a fixed cadence on shod and barefoot gait kinematics, *2012 Gait and Clinical Movement Analysis Society Annual Meeting*, Grand Rapids, MI.

Weimar, W., Sumner, A. M.\*, Patel, J.\*, Romer, B.\*, Fox, J.\*, Snead, J.\*, & Shroyer, J. F.\*

 (2011). Kinetics and kinematics of swimming push-off strategies. *Proceedings of*

 *the 35th Annual Meeting of the American Society of Biomechanics*. Long Beach,

 CA. (pp. 354-355).

Romer, B.H**.\***, Johnson, D., Romer, T.L., Sinclair, A., & Weimar, W. (2011).

Changes in effort distribution of American collegiate triple jumpers during the course of a season, *Proceedings of the 35th Annual Meeting of the American Society of Biomechanics*. Long Beach, C.A. (pp. 656-657).

 Shroyer, J. F.\* & Weimar, W. (2010). Effect of various thong flip-flops on gait

 kinetics. *Proceedings of the 34th Annual Meeting of the American Society*

 *of Biomechanics, Providence, Rhode Island.* (pp. 500-501).

 Weimar, W., Madsen, N., Garner, J.\*, & Wang, Y. (2010). Two-dimensional sequential

 analysis of the front snap kick. *Proceedings of the 34th Annual Meeting of the*

 *American Society of Biomechanics, Providence, Rhode Island* (pp. 890-891)

 Shroyer, J. F.\*, Weimar, W. & Robinson, L. (2009). Influence of thong flip-flops on

running kinematics in preschoolers. Proceedings of the 33rd Annual Meeting of

the American Society of Biomechanics, University Park, Pennsylvania. (pp. 823-

824).

 Weimar, W., Garner, J. C.\*, Campbell, B. J.\*, & St. Onge, P.\* (2008). The influence of

 height and edge proximity on balance and reaction time. *Proceedings of the*

 *North American Congress on Biomechanics*. *University of Michigan, Ann Arbor,*

 *Michigan.* (pp. 454-455).

 Garner, J.C.\*, Weimar, W., & Madsen, N. (2008). Two-dimensional sequential

analysis of the underhand softball pitch. *The Proceedings of the North*

*American Congress on Biomechanics, University of Michigan, Ann Arbor,*

*Michigan*. (pp. 710-711).

Wade, L.\*, Weimar, W., & Davis, G. (2004). The influence of an inclined surface on flat

surface postural control. *Proceedings of the Human Factors and Ergonomics*

*Society (HFES) 48th Annual Meeting.* (pp. 1431-1434).

Wade, L.\*, Weimar, W., & Davis, G. (2003). The effect of flat surface postural stability following extended durations on a pitched roof setting. *Proceedings of the Human Factors and Ergonomics Society 47th Annual Meeting* (pp. 1295-1298).

Weimar, W., Williams, C., Clark, T., Vrongistinos, K., Zhong, Y., & Wang, T. (1998). Balance in older individuals. *Proceedings of the North American Congress on Biomechanics, University of Waterloo, Ontario, Canada*. (pp. 29-30).

## Abstracts in Conference Proceedings and/or Supplemental Issues

Rehm, J., Jagodinsky, A., Wilburn, C., Smallwood, L., Windham, J. & Weimar, W. (2021)

Evidence for Utilizing Field Tests in Wheelchair Basketball Classification. VISTA Conference, Virtual

Hill, I.N., **Weimar, W**., Wilburn, Decoux, B., Moore, N., Kosek, J. & Wadsworth, D. (2020).

Fitness assessments in preschoolers. Southeastern American College of Sports

Medicine Annual Conference, Virtual

Kosek, J.J., Wadsworth, D., **Weimar, W.H**., Wilburn, C.M., Decoux, B.E., Moore, N.H., Hill,

I.N. (2020). Power in pres-schoolers. Southeastern American College of Sports

Medicine Annual Conference, Virtual

Wilburn, C., Decoux, B., Williams, P., Hill, I., Kosek, J., **Weimar, W**., & Price, S. (2020).

Taking the best foot forward. Southeastern American College of Sports

Medicine Annual Conference, Virtual

Wadsworth, D., **Weimar, W.H**., Wilburn, C.M., Decoux, B.E. (2020). Musculoskeletal fitness

in preschoolers: A biomechanical perspective. Southeastern American College of

Sports Medicine Annual Conference, Virtual

Decoux, B.E., Wilburn, C.M., Moore, N.H. & **Weimar, W.H.** (2019). Comparison of single-leg

hopping parameters across different artificial turf systems and natural turfgrass. Medicine and Science in Sport and Exercise, Supplement 49(5) S42. ACSM National Conference Orlando, FL

**Weimar, W**., Decoux, B., Moore, N. & Wilburn, C. (2019) Influence of turf surface on change

of direction parameters. Medicine and Science in Sport and Exercise, Supplement

49(5) S45. ACSM National Conference Orlando, FL

Sagama, H., Jagodinsky, A.E., Zaman, M., Wilburn, C. & **Weimar, W.** (2019). Kinetic

strategies during single-leg hopping in individuals with and without chronic ankle instability. Medicine and Science in Sport and Exercise, Supplement 49(5) S44. ACSM National Conference Orlando, FL

Santillan, C., Jagodinsky, A.W., Zaman, M., Wilburn, C. & **Weimar, W.** (2019). Ankle bracing

effects on contributions to the support moment during hopping. Medicine and Science in Sport and Exercise, Supplement 49(5) S47. ACSM National Conference Orlando, FL

Vasudevaraja, U., Jagodinsky, A.E., Zaman, M., Wilburn, C. & **Weimar, W.** (2019). Support

moment dynamics are similar in individuals with and without chronic ankle instability during hopping. Medicine and Science in Sport and Exercise, Supplement 49(5) S47. ACSM National Conference Orlando, FL

Wilburn, C.M., Decoux, B.E., Fawcett, R.T., Williams, P.T., Moore, N.H. & **Weimar, W.H**.

(2019). Effects of arch type on the propulsion of mechanics of jumping and hopping

tasks. Medicine and Science in Sport and Exercise, Supplement 49(5) S211. ACSM

National Conference Orlando, FL

Wilburn, C.M., Decoux, B.E., Fawcett, R.T., Williams, P.T., Moore, N.H. & **Weimar, W.H**.

(2019). Effects of arch type on center of mass displacement and kinetics during lateral

hopping. *Southeastern American College of Sports Medicine Annual Conference*,

Greenville, SC.

## Decoux, B.E., Wilburn, C.M., Moore, N.H. & Weimar, W.H. (2019). Comparison of single-leg

## hopping parameters across different artificial turf systems and natural turfgrass.

## Southeastern American College of Sports Medicine Annual Conference, Greenville,

## SC

## Moore, N.H., Decoux, B.E., Wilburn, C.M. & Weimar, W.H. (2019). Change in

## direction task across different playing surfaces. Southeastern American

## College of Sports Medicine Annual Conference, Greenville, SC

## Fox, J.W., Wilburn, C.M., Jagodinsky, A.E., Smallwood, L.L. & Weimar, W.H. (2019).

## Comparison of optimal and isometric force in squats. Southeastern American College

## of Sports Medicine Annual Conference, Greenville, SC

## Weimar, W.H., Wilburn, C.M., Decoux, B.E. & Roper, J.A. (2019). Walk with us.

## Southeastern American College of Sports Medicine Annual Conference, Greenville,

## SC

**Weimar, W.H.,** Plummer, H.A., Fawcett, R. & Oliver, G.D. (2017). Spatio-temporal

measures of overhand pitches. *Southeastern American College of Sports Medicine*

*Annual Conference,* Greenville, SC.

Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Decoux, B.E., Williams, P.T., Brewer, L.E.,

Smallwood, L.L., Moore, N.H., Kitchens, M.W.& **Weimar, WH**. (2017). The interaction

of arch height stiffness and center of pressure mediolateral deviation in different sock

types. *Southeastern American College of Sports Medicine Annual Conference,*

Greenville, SC.

Decoux, B.E., Wilburn, C.M., Brewer, L.E., Fox, J.W., Jagodinsky, A.E., Williams, P. T.,

Smallwood, L.L., Moore, N.H., Kitchens, M.W. & **Weimar, W.H.** (2017). Investigation

of static versus dynamic arch height stiffness and bilateral symmetry during barefoot

walking. *Southeastern American College of Sports Medicine Annual Conference,*

Greenville, SC.

Williams, P.T., Wilburn, C.M., Dupiton, M.E., Morris, M.A., McRoy, J.E., Price, S.L.,

Smallwood, L.L., Kitchens, M.W., Moore, N.H., Decoux, B.E., Brewer, L.E., & **Weimar,**

**W.H.** (2017). Arch height Stiffness and arch height index across grades. *Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC

Kitchens, M.W., Jagodinsky, A.E., Wilburn, C.M., Moore, N.H., Bois, K.R., & **Weimar,**

**W.H.** (2017). The influence of an isometric squat on vertical jump. *Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Moore, N.H., Kitchens, M.W., Brewer, L.E., Decoux, B.E., Wilburn, C.M**.**, Smallwood, L.L.,

Williams, P. T., & **Weimar, W.H**. (2017). Influence of preparatory arm motion on

running acceleration. *Southeastern American College of Sports Medicine*

*Annual Conference,* Greenville, SC.

Smallwood, L.L., Williams, P.T., Moore, N.H., Kitchens, M.W., Wilburn, C.M., & **Weimar,**

**W.H**. (2017). Interaction of high heel shoe insert during gait. *Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Price, S.L., **Weimar, W.H**., Wadsworth, D., Wilburn, C.M., Williams, P.T. & Rudisill, M.E.

(2017). Research collaborations between majority and minority serving institutions:

Auburn University and Florida A&M University makes it happen, A Round Table

Discussion. *American Kinesiology Leadership Workshop.* Westlake, Tx.

Rankin, E.M., Wagner, B.L. & **Weimar, W.H**. (2016). The influence of a rider with a disability

on the equine walk. *Southeast American Society of Animal Science*.

Patel, J. & **Weimar, W.H**. (2016). Effect of arm and leg constraints on gait kinetics during

bipedal acceleration. *The 39th National Strength and Conditioning Association (NSCA) National Conference*. New Orleans, LA.

Rehm, J., Jagodinsky, A., Wilburn, C., Smallwood, L., Wright, T., Windham, J. &

**Weimar, W**. (2016). Measuring trunk stability for wheelchair basketball

classification. *North American Federation of Adapted Physical Activity Symposium*. Edmonton, Canada.

Rehm, J., Jagodinsky, A., Wilburn, C., Smallwood, L., Wright, T., Windham, J. & **Weimar, W.**

(2016). Measuring volume of action for wheelchair basketball classification. *North American Federation of Adapted Physical Activity Symposium*. Edmonton, Canada.

Iso-Ahola, S. E., Jagodinsky, A. E., Clark, L. C. , Smallwood, L. L., Wilburn, C., **Weimar,**

**W. H**., Dotson, C. O., & Miller, M. W. (2016). Improving performance by

anchoring movement and “nerves”. *North American Society for the Psychology of Sport and Physical Activity Annual Meeting*, Montreal, Canada.

Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Nabity, C.E., Javage, E.A., Smallwood, L.L.,

Williams, P.T., Moore, N.H., Kitchens, M.W., Bois, K.R., & **Weimar, W.H.**, (2016). The influence of sock type on foot function during walking gait. *National Black Graduate and Professional Student Association Annual Conference*. Houston, Tx.

Jagodinsky, A.E., Costello, D., Wilburn, C.M., Smallwood, L.L., & **Weimar, W.H.**

(2016). Assessment of lower extremity joint kinetics during a continuous bout of kettlebell swings. *SEACSM Annual Conference*. Greenville, S.C.

Romer, B.H., Fox, J.W., Jagodinsky, A.E. & **Weimar, W.H.** (2016). Lower extremity

muscle activity is not altered by footwear. *SEACSM Annual Conference*. Greenville, S.C.

Nabity, C.E., Wilburn, C.M., Fox, J.W., Javage, E.A., Jagodinsky, A.E., Smallwood, L.L., &

**Weimar, W.H.** (2016). Interaction of arch type and various socks on center of pressure deviation. *SEACSM Annual Conference*. Greenville, S.C.

Bois, K.R., Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H.,

Kitchens, M.W., Williams, P.T., Brewer, J.M., & **Weimar, W.H.** (2016). The impact of

sock type on stride length and stride frequency. *SEACSM Annual Conference*.

Greenville, S.C.

Moore, N.H., Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Kitchens, M.W.,

Bois, K.R., Williams, P.T., Brewer, J.M., & **Weimar, W.H.** (2016). The impact of athletic and cotton socks on toe in and toes out and walking velocity during shod gait. *SEACSM Annual Conference*. Greenville, S.C.

Javage, E.A., Wilburn, C.M., Fox, J.W., Nabity, C.E., Jagodinsky, A.E., Smallwood, L.L., &

**Weimar, W.H.** (2016). The effect of arch type and sock type during shod gait. *SEACSM Annual Conference*. Greenville, S.C.

Kitchens, M.W., Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H.,

Bois, K.R., Brewer, J.M. & **Weimar, W.H.** (2016). Influence of arch height and sock type on toe in and toe out during gait. *SEACSM Annual Conference*. Greenville, S.C.

Williams, P.T., Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H.,

Kitchens, M.W., Bois, K.R., & **Weimar, W.H**. (2106). The effect of arch type and sock type during shod gait with a runners loop lacing strategy. *SEACSM Annual Conference*. Greenville, S.C.

Smallwood, L.L., Wilburn, C.M., Jagodinsky, A.E., Moore, N.H., Kitchens, M.W., Bois, K.R., &

**Weimar, W.H**. (2016). Interaction of shoe type on stride parameters. *SEACSM Annual Conference*. Greenville, S.C.

Fox, J.W., Jagodinsky, A.E., Wilburn, C.M., Smallwood, L.L. & **Weimar, W.H**. (2016). Force

increases with leg extension. *SEACSM Annual Conference*. Greenville, S.C.

Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H., Kitchens, M.W.,

Bois, K.R., Williams, P.T., Brewer, J.M., & **Weimar, W.H.** (2016). The impact of sock

type on the center of pressure and spatio-temporal parameters of gait. *SEACSM*

*Annual Conference*. Greenville, S.C.

**Weimar, W.H.**, Oliver, G.D. & Patel, J. (2015). Implications of the kinetic change in overhand

throwing. *SEACSM Annual Conference*. Jacksonville, FL.

Fox, J.W., Patel, J.H., Romer, B.H., Rehm, J.M., **Weimar, W.H.** (2015). EMG amplitude and

local minimum force in eccentric loading. *SEACSM Annual Conference*. Jacksonville, FL.

Romer, B.H., Fox, J.W., Jagodinsky, A.E., Rehm, J.M. & **Weimar, W.H.** (2015). Effect of

textured insoles on spatiotemporal variables during faster than normal walking.

*SEACSM Annual Conference*. Jacksonville, FL.

McMaster, M. Hanson, R., Munsterman, A., & **Weimar, W**. (2015). Modified equine teno-fix

tenorrhaphy repair. *American College of Veterinary Surgeons*, San Diego, CA

Wilburn, C.M., Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., & **Weimar, W.H.** (2015).

Influence of shoe lacing strategies on center of pressure deviation. *SEACSM Annual Conference*. Jacksonville, FL.

Smallwood, L.L., Fox, J.W., Jagodinsky, A.E., Wilburn, C.M., **Weimar, W.H.** (2015).

Examination of spatiotemporal parameters involving shoe lacing strategies and gait.

*SEACSM Annual Conference*. Jacksonville, FL.

**Weimar, W.H**., Patel, J.H., Fox, J.W., Jagodinsky, A.E., and Rehm, J.M. (2014). Effect of

arm constraints on step length during bipedal acceleration. *American College of Sports Medicine Annual Meeting, Orlando, FL. Medicine and Science in Sports and Exercise, 45.*

Patel, J.H., Fox, J.W., Jagodinsky, A.E., Rehm J.M., and **Weimar, W.H.** (2014). Effect of

arm constraints on gluteus maximus EMG during bipedal acceleration. *American College of Sports Medicine Annual Meeting, Orlando, FL. Medicine and Science in Sports and Exercise, 45.*

Patel, J. H., Jagodinsky, A. E., Oliver, G.D., & **Weimar, W. H**. (2013). Force test of

internal rotation during various pelvis girdle positions. *American College of Sports*

*Medicine Annual Meeting, Indianapolis, IN. Medicine and Science in Sports and*

*Exercise, 45.*

Oliver, G. D., Stone, A.J. & **Weimar, W.H.** (2013). Effects of shoulder fatigue on ground

reaction forces in softball players. *American College of Sports Medicine Annual Meeting, Indianapolis, IN. Medicine and Science in Sports and Exercise, 45.*

Fox, J.W.\*, Rehm, J.M.\*, Romer, B.H.\*, Patel, J.H.\*, Oliver, G.D.\*, & **Weimar, W.H.** (2013). A

comparison of Impulse from four loading configurations. *American College of Sports Medicine, International Meeting, Indianapolis, IN. Medicine and Science in Sports and Exercise, 45.*

**Weimar, W.H.**, Oliver, G.D., & Patel, J.H.\* (2013). Glenohumeral joint motion involves the

whole body, just ask Dartfish. *SEACSM Conference,* Greenville, SC (Tutorial).

Sumner, A.M. & **Weimar, W.H.** (2013). Influence of a marching snare drum lumbar belt on

contact pressure and its clinical relevance. *American Academy of Physician Assistants Annual Conference, Washington, D.C.*

Romer, B.H.\*, Fox, J.W.\*, Rehm, J.M.\*, Patel, J.H.\* & **Weimar, W.H.** (2013). Footwear and

cadence effects on spatiotemporal gait parameters. *SEACSM Conference,* Greenville, S.C.

Fox, J.W.\*, Patel, J.W.\*, Romer, B.H.\*, Rehm, J.M.\* and **Weimar, W.H.** (2013). Vertical

ground reaction forces during four loading conditions. *SEACSM Conference,*

Greenville, S.C.

Lowe, C.\*, Romer, B.\*, Bass, R., & **Weimar, W.** (2012). Subconscious human gait alteration

to external stimuli. *Annual Biomedical Research Conference for Minority Students,*

San Jose, CA.

Romer, B.H.\*, Patel, J.H.\*, Fox, J.W.\*, Rehm, J.M.\*, Sumner, A.M.\*, & **Weimar, W.H.** (2012).

Turn time for four different flip-turn styles. *SEACSM Conference,* Jacksonville, FL.

Rehm, J.M.\*, Patel, J.H.\*, Romer, B.H.\*, Fox, J.W.\*, Sumner, A.M.\*, & **Weimar, W.H.** (2012).

Force production of three different flip-turn styles while riding a dry land cart. *SEACSM*

*Conference,* Jacksonville, FL.

Sumner, A.M.\*, **Weimar, W.H**., Patel, J.H.\*, Romer, B.H.\*, Fox, J.F.\*, & Rehm, J.M.\* (2012).

Influence of a marching snare drum system on contact pressure. *SEACSM*

*Conference,* Jacksonville, FL.

Romer, B.H.\*, Fox, J.\*, Johnson, D., Romer, T.L., Sinclair, A., & **Weimar, W.H.** (2011). Phase

lengths of division-one American collegiate triple jumpers. American College of Sports

Medicine, International Meeting, Denver, CO. *Medicine and Science in Sports and*

*Exercise, 43, S289-S290.*

Patel, J.H.\*, Romer, B.H.\*, Fox, J.\*, & **Weimar, W.H.** (2011). Vertical compression with a back

squat. *SEACSM Conference*, Greenville, S.C.

**Weimar, W**. & Martin, E. H. (2011). Using skill analysis to inform assessment. *Research*

*Quarterly for Exercise and Sport*, 82: S653.

Etheredge, C.E., Shroyer, J.F.\*, & **Weimar, W.H**. (2011). Effect of minimalist

footwear on arch rigidity index. *Medicine and Science in Sports and Exercise,* 43: S214.

Shroyer, J.F.\*, Etheredge, C.E. & **Weimar, W.H.** (2011). Effect of minimalist

footwear on medial arch height. *Medicine and Science in Sports and Exercise,* 43:

S215.

Romer, B.H.\*, Fox, J.\*, Johnson, D., Romer, T.L., Sinclair, A., & **Weimar, W.H.** (2011). Phase

lengths of division-one American Collegiate Triple Jumpers. *Medicine and Science in Sports and Exercise,* 43: S289.

**Weimar, W**., & Sumner, A. E.\* (2011). Dartfish: A movement analysis and data collection tool.

*Proceedings Southeast ACSM*.

Fox, J.\*, Shroyer, J. F.\*, Patel, J.\*, Sumner, A. E.\*, & **Weimar, W.** (2011). Influence of

footwear on limits of stability. *Proceedings Southeast ACSM*.

Snead, J.\*, Shroyer, J. F.\*, Patel, J.\*, Sumner, A. E.\* & **Weimar, W.** (2011). The effect of

footwear on dual stance balance. *Proceedings Southeast ACSM*.

Shroyer, J. F.\*, Shroyer, J. E.\*, Sumner, A. E.\*, Patel, J.\*, & **Weimar, W.** (2011). The effect of

footwear on unilateral stance sway velocity. *Proceedings Southeast ACSM*.

Patel, J.\*, Romer, B.\*, Fox, J.\* & **Weimar, W.** (2011). Vertebral compression with a back

squat. *Proceedings Southeast ACSM*.

Knight, A.C.\* & **Weimar, W.** (2011). Effects of injury and tape on dynamic ankle inversion

using a fulcrum methodology. *Journal of Athletic Training, 46*(3), S183.

Knight, A.C..\* & **Weimar, W.** (2010). Startle response in inversion perturbation. *Proceedings*

*Southeast ACSM*.

Knight, A. C.\* & **Weimar, W**. (2010). Startle response of the ankle musculature to repeated

inversion perturbations. *Journal of Athletic Training,* 45(3), S109.

Shroyer, J. F.\* & **Weimar, W.** (2010). The effect of flip-flops on dorsiflexion and tibialis

anterior electromyography. *Proceedings of Southeast ACSM*.

**Weimar, W.**, Shroyer, J. F.\*, Sumner, A. M.\*, Shroyer, J. E.\* & Robinson, L. (2010). Influence

of thong flip-flops on the kinematics of the horizontal jump of pre-schoolers. *Proceedings of Southeast ACSM*.

Sumner, A. M.\*, **Weimar, W**., Shroyer, J. F.\*, Shroyer, J. E.\*, & Robinson, L. (2010). Influence

of thong flip-flops on the kinematics of the gallop of preschoolers. *Proceedings of Southeast ACSM*.

Shroyer, J. E.\*, **Weimar, W.**, Shroyer, J. F.\*, & Sumner, A. M.\* (2010). Bilateral balance and

footwear. *Medicine and Science in Sport and Exercise*, 42(5), S350.

Shroyer, J. F.\*, Shroyer, J. E.\*, Sumner, A. M.\*, & **Weimar, W**. (2010). Effect of various thong

flip- flops on pronation and eversion during midstance. *Medicine and Science in Sport and Exercise*, 42(5), S190.

**Weimar, W.**, Shroyer, J. F.\*, Sumner, A. M.\*, & Shroyer, J. E.\* (2010). Limit of stability and

footwear. *Medicine and Science in Sport and Exercise* 42(5), S347.

Sumner, A. M.\*, **Weimar, W.**, Shroyer, J. F.\*, & Shroyer, J. E.\* (2010). The influence of shoe

type on rhythmic weight shift. *Medicine and Science in Sport and Exercise* 42(5), S348.

Knight, A. C.\* & **Weimar, W.** (2009). Difference in latency of the peroneus longus between

dominant and non-dominant leg. *Journal of Athletic Training*, 44(3), S119.

Guidry, T.\*, Campbell, B. J.\*, Shroyer, J. F.\*, Knight, A. C.\*, & **Weimar, W**. (2009).

Neurological insufficiency: The biceps brachii potential in pronated elbow flexion. *Medicine and Science in Sports and Exercise,* 41(5), S293.

Rudisill, M., Robinson, L., Breslin, C. M., Shroyer, J. F., **Weimar, W.,** & Castro, M.

(2009). The influence of footwear on preschoolers’ locomotor skill performance. *Journal of Sport & Exercise Psychology*, 41, S42.

Sumner, A. M.\*, Good, R., & **Weimar, W.** (2009). The use of a two-dimensional comparison in

collegiate conducting. *Proceedings Director National Association*.

Knight, A. C.\*, Shroyer, J. F.\*, Sumner, A. M.\*, Booker, J. E.\*, & **Weimar, W.** (2009). Influence

of ankle taping on the kinetics of a lateral jump. *Medicine and Science in Sport and*

*Exercise*, 41(5), S391.

Garner, J. C.\*, **Weimar, W.**, & Madsen, N. (2009). Kinematic and kinetic comparison of

overhand and underhand pitching: Implications to proximal-to-distal sequencing.

*Medicine and Science in Sport and Exercise* 41(5), S486.

Rudisill, M. E., Robinson, L. E., Breslin, C. M.\*, Shroyer, J. F.\*, **Weimar, W. H.**, & Morera, M.\*

(2009). The influence of footwear on preschoolers‟ locomotor skill performance.

*Journal of Sport & Exercise Psychology*, 31, S34.

Garner, J. C.\*, Knight, A. C.\*, **Weimar, W.,** & McDonald, C.\* (2008). Glenohumeral range of

motion of overhead athletes versus non-overhead athletes. *Journal of Strength and Conditioning Research,* 22(5): S453.

**Weimar, W.** & Martin, E. H. (2008). Skill analysis – A toolbox necessity: The specifics.

*Research Quarterly for Exercise and Sport*, 79, S181.

Knight, A. C.\*, **Weimar, W**., Shroyer, J. F.\*, Sumner, A. M.\*, & Booker, J. E.\* (2008). The

influence of four different types of athletic tape used for ankle taping on attack angle.

*Southeastern Meeting of the American Society of Biomechanics*.

Campbell, B. J.\*, Jeansonne, C.\*, & **Weimar, W**. (2008). Football makes you shorter.

*Medicine and Science in Sports and Exercise*, 40(5), S214.

Shroyer, J. F.\*, **Weimar, W**., Garner, J. C.\*, Knight, A. C.\* & Sumner, A. M.\* (2008). Influence

of sneakers versus flip-flops on attack angle and peak vertical force at heel contact. *Medicine and Science in Sports and Exercise*, 40(5), S333.

Garner, J. C.\*, **Weimar, W.** & Madsen, N. (2008). Kinematic analysis of the underhand

softball pitch. *Medicine & Science in Sports & Exercise*, 40(5), S377.

**Weimar, W.**, Overfelt, R., Shroyer, J. F.\*, Knight, A. C.\*, Sumner, A. M.\*, & Garner, J. C.\*

(2008). The influence of mechanical stimulation on center of gravity. *Medicine and Science in Sports and Exercise* 40(5), S345.

Booker, J. E.\*, Sumner, A. M.\*, & **Weimar, W**. (2008). The influence of shoe type on ankle

angle. *Medicine & Science in Sports & Exercise* 40(5), S338.

Sumner, A. M.\*, & **Weimar, W.** (2008). The influence of shoe type on stride length. *Medicine*

*and Science in Sports and Exercise*, 40(5), S355.

Garner, J.C.\*, **Weimar, W.H**., & Madsen, N.H. (2008). Analysis of the underhand windmill

pitch. *Proceedings of the Southeast American Society of Biomechanics:* 32.

Campbell, B. J.\*, Gary, M.\*, Savoi, J.\*, **Weimar, W.**, & Garner, J. C.\* (2007). External palm

padding and its effect on sound production during football catching. *Journal of*

*Strength and Conditioning Research,* 22(5), S453.

**Weimar, W**. & Martin, E. H. (2007). Skill analysis – A toolbox necessity. *Research Quarterly*

*for Exercise and Sport*, 78, S389.

Campbell, B. J.\*, **Weimar, W.**, Garner, J. C.\*, & Knight, A. C.\* (2007). Unilateral patella

tendon strap effects on weight bearing squat in healthy males. *Journal of Athletic Training,* 42(2), S136.

Knight, A. C.\*, Garner, J. C.\*, Shroyer, J. F.\* & **Weimar, W**. (2007). Comparison of

glenohumeral range of motion in throwing athletes versus non-throwing athletes.

*Medicine and Science in Sport and Exercise*, 39(5), S477.

Shroyer, J. F.\*, **Weimar, W.**, Garner, J. C.\*, & Overfelt, R. (2007). Effect of mechanical

stimulation of peripheral nerves of the forearm on cognitive thinking performance. *Medicine and Science in Sport and Exercise* 39(5), S268.

Breslin, C. M.\*, **Weimar, W**., Garner, J. C.\*, Parish, L. E.\*, Campbell, B. J.\*,& Rudisill, M.

(2007). Relationship between humeral angle and ball lag across different ball weights

and sizes. *Medicine and Science in Sport and Exercise*, 39(5), S479.

Garner, J. C.\*, **Weimar, W**., Breslin, C. M.\*, Parish, L. E.\*, Campbell, B. J.\* & Rudisill, M. E.

(2007). The influence of ball size and weight on lag period of upper arm in overhand throwing. *Medicine and Science in Sport and Exercise*, 39(5), S477.

**Weimar, W**., Garner, J. C.\*, Breslin, C. M.\*, Parish, L. E.\*, & Rudisill, M. (2007). The influence

of ball weight and size on shoulder external rotation. *Medicine and Science in Sport*

*and Exercise*, 39(5), S477.

Campbell, B. J.\*, **Weimar, W.**, & Garner, J. C.\* (2007). The role of an external counter-

moment on the perceived pain of tennis elbow. *Medicine and Science in Sport and Exercise*, 39(5), S475.

Garner, J. C.\*, **Weimar, W**., Campbell, B. J.\*, Breslin, C. M.\*, Rudisill, M., & Parish, L. E.\*

(2006). Influence of ball weight on ball lag in throwing. *Journal of Sport and Exercise Psychology*, 28, S71.

Breslin, C. M.\*, Rudisill, M., Parish, L. E.\*, St Onge, P. M.\*, **Weimar, W.**, Garner, J. C.\*, &

Campbell, B. J.\* (2006). The effects of weight and size of the ball on humeral lag when

throwing: Measurement concerns. *Journal of Sport and Exercise Psychology*, 28, S39.

Garner, J. C.\* , Blackburn, J. T. , **Weimar, W. H**, Campbell, B. J.\* (2006). Comparison of EMG

amplitude of eccentrically loaded versus concentrically loaded isometric muscle

actions. *Medicine and Science in Sport and Exercise*, 38(5), S264.

Campbell, B. J.\*, **Weimar, W.**, & Garner, J. C.\* (2006). Counter-moment effects on active

wrist extensor muscles during maximal gripping. *Medicine and Science in Sport and*

*Exercise*, 38(5), S268).

**Weimar, W**., Campbell, B. J.\*, Garner, J. C.\* , & St Onge, P. M.\* (2006). The influence of

height and edge proximity on balance. *Medicine and Science in Sport and Exercise*,

38(5), S451.

St Onge, P. M.\*, **Weimar, W.**, Parish, L. E.\* , & Rudisill, M. (2005). Does static balance

predict dynamic balance activity choices in toddlers. *Journal of Sport and Exercise Psychology*, 27, S32.

Parish, L. E.\*, Rudisill, M., St Onge, P. M.\*, & **Weimar, W**. (2005). Mastery motivational motor

skills program: Influence on heart rate and physical activity levels in toddlers. *Journal of Sport and Exercise Psychology*, 27, S71.

**Weimar, W.** & Campbell, B. J.\* (2005). The role of the latissimus dorsi in pelvic girdle

motions. *Medicine and Science in Sport and Exercise*, 37(5), S394.

**Weimar, W.** & Martin, E. H. (2005). Influence of instructional strategies on the kinematics of

motor skill performance. *Research Quarterly for Exercise and Sport*, 76: S734.

**Weimar, W**. & Martin, E. (2004). The influence of cue words on shoulder and knee

kinematics. *Research Quarterly for Exercise and Sport*, 75, S698.

**Weimar, W**., & Campbell, B.\* (2004). The influence of ankle cryotherapy on unilateral static

balance. *Medicine and Science in Sport and Exercise*, 37(5), S187.

Wade, L.\*, & **Weimar, W**. (2003). The influence of incline sprint training on postural stability.

*Medicine and Science in Sport and Exercise*, 37(5), S266.

**Weimar, W.**, Rudisill, M., Stodden, D.\*, & Martin, E., (2002). Biomechanical changes of motor

skill performance under different cue word conditions. *Research Quarterly for Exercise*

*and Sport*, 73, S54.

Rudisill, M., Martin, E., **Weimar, W.,** Wall, S.\*, Valentini, N. (2002). Fundamental motor skill

performance of young children living in urban and rural Alabama. *Research Quarterly*

*for Exercise and Sport*, 73, S398.

**Weimar, W**. & Williams, C. (2002). Changes in resultant ground reaction force at heel strike

for older versus younger populations. *Medicine and Science in Sport and Exercise*, 34(5), S253.

McGinn, P. A.\*, **Weimar, W.**, Mattacola, C.G. & Rudisill, M. (2002). Dynamic balance of

injured division I collegiate athletes on two different surfaces. *Journal of Athletic Training*, 37(2), S98).

**Weimar, W.**, Pascoe, D., Wang, Y., & Williams, C., (2001). Changes in resultant ground

reaction force at heel strike at different load conditions. *Medicine and Science in Sport*

*and Exercise*, 33(5), S128.

Maginn, P.\*, **Weimar, W.**, & Rudisill, M. , (2001). Comparison of division I athletes dynamic

balance measures on two different surfaces. *Medicine and Science in Sport and Exercise*, 33(5), S83.

**Weimar, W. H.**, Rudisill, M. E., Martin, E. H., Stodden, D. F., Adalbjornsson, C. F., &

Goodway, J. (2001). How cue words influence the biomechanical parameters of motor skill acquisition. *Journal of Sport & Exercise Psychology*, 23, S54.

Martin, E., Rudisill, M., **Weimar, W.**, Wiley, P., & Lehman, D. (2001). A mastery motivational climate

motor skill intervention and motor skill development in a naturalistic setting. *Journal of Sport and Exercise Psychology*, 23, S55.

**Weimar, W**., Rudisill, M., Martin, E., Stodden, D., Adalbjornsson, C., & Goodway, J., (2001).

How cue words influence the biomechanical parameters of motor skill acquisition.

*Journal of Sport and Exercise Psychology*, 23, S54.

**Weimar, W**. & Wang, T. (2000). Balance determination from force platform data only.

*Medicine and Science in Sport and Exercise*, 32(5), S248.

Rudisill, M.E., **Weimar, W**., Stodden, D.\*, Adalbjornsson, C.\*, Martin, E. H. & Goodway, J. D.

(2000). Cue words and skill acquisition. Presented to the Motor Development Research Consortium, Bowling Green University, Bowling Green, Ohio.

Wang, T., Pascoe, D., **Weimar, W.**, & Pearl, M., (1999). Applications of the indexes of load

stresses in walking. *Medicine and Science in Sport and Exercise*, 31(5), S407.

**Weimar, W.**, Madsen, N., & Wang, T. (1999). Partitioning accelerations to reveal the influence

of the Coriolis effect. . *Medicine and Science in Sport and Exercise*,31(5), S304.

Williams, C., Wang, T., **Weimar, W.**, Vrongistinos, K., & Zhong, Y. (1999). The effect of age

on gait kinetics. *Medicine and Science in Sport and Exercise*, 31(5), S407.

**Weimar, W**., Clark, T., Williams, C., Zhong, Y., Vrongistinos, K., & Wang, T., (1998). Effects

of age, gender and dominance on lower extremity muscle strength. *Medicine and*

*Science in Sport and Exercise*, 30(5), S29

### Contributions to Teaching:

Curriculum development:

KINE 4400 – Applied Anatomy for the Allied Health Professional KINE 5620 – Sport Techniques and Movement Analysis KINE 5630 – Strength and Conditioning Exam Preparation KINE 5640 – Corrective Exercise Specialist Exam Preparation

KINE 7400 – Advanced Anatomical Principles

KINE 7410 – Laboratory for Advanced Anatomical Principles KINE 7420 – Dartfish I – Biomechanics of Skill Analysis

KINE 7430 – Dartfish II – Advanced Biomechanics of Skill Analysis

Distance Education Classes:

KINE 7406 – Distance Education: Advanced Anatomical Principles

KINE 7416 – Distance Education: Laboratory for Advanced Anatomical Principles KINE 7426 – Distance Education: Dartfish I – Biomechanics of Skill Analysis

KINE 7436 – Distance Education: Dartfish II – Advanced Biomechanics of Skill Analysis

KINE 7626 – Distance Education: Principles of Biomechanics

These classes for the requirements for a Distance Graduate Certificate in Skill Analysis

## Grants and Contracts

Funded: $1,153,760

Rehm J. (PI), Weimar, W (Co-PI). (2021-2023). Measuring Trunk Stability and Range of Motion for Wheelchair Basketball, HHS-2021-ACL-NIDILRR-IFST-0023 $600,000

DCSITE Grant Veterinary School Handler and Dog longevity. (2021-2026) Weimar, W., Wadsworth, D, Neely, K., Oliver, G., Sefton, J. Subtask: 70RSAT21CB0000xx $125,760

Weimar, W.H. (PI) (2018-2019). Turf surface evaluation Phase 2 A and 2B. Shaw Industries. $29,000

Weimar, W.H. (Presenter) (2018). Evaluation of Turf Surfaces. Shaw Industries. $8,500

Weimar, W.H. (PI) (2017). Evaluation of natural and artificial playing surfaces regarding ball and athletic performance, and human perception on different surfaces. Shaw Industries. $40,000

Weimar, W.H. (PI) (2016). The Influence of lifting device on the kinematics, kinetics and electromyography during the bicep curl and the front raise (DB2). Centerweight Industries. $10,180

Weimar, W.H. (PI) (2016). Pitching metrics from draft videos. Houston Astros. $8,000.

Weimar, W.H. (PI) (2015). Running shoe recommendations. Big Dog Running. $12,300

Robert, M. (PI), Pascoe, D. & Weimar, W (Co-PI’s) (2014). Effects Of Bcaa-Carb Drink On Markers Of Muscle Damage, Inflammation, Hydration Status & Performance. Musclepharm-15. $88,819.

Weimar, W.H. (PI) (2007). Kinematics & Kinetic Analysis Of Approach & Pushoff Strategies.

USA Swimming. $15,000.

Not Funded:

Homer, V. (Principle), Wilburn, C.M., Weimar, W.H., & Devita, P. (2016). Quantifying orthotic foot-bed properties on lower-extremity injuries in an athletic setting. $200,000. (not funded)

Weimar, W.H. (Principal) & Wilburn, C.M. (2015). Foot health in under-represented youth. Auburn University Office of University Outreach and Engagement. $16,087. (not funded)

Weimar, W.H. (Co-Principle) & Braden Romer (Co-Principle) (2015). Lumbopelvic-hip Coordination & Muscle Activity During Anterior Load Lifting. Central Appalachian Regional Education and Research Center. $11,332. (Rejected)

Weimar, W.H. (Principal) & Romer, B.H. (2012). Effect of footwear on lumbopelvic and lower-extremity kinematics, kinetics, and muscular activation in an occupational setting. NIOSH Exploratory and/or developmental grant program (R21). $200,204. (Score: 50, Percentile: 39)

Weimar, W.H. (Principal) & Romer, B.H. (2011). Effect of footwear on lumbopelvic and lower-extremity kinematics, kinetics, and muscular activation in an occupational setting. NIOSH Exploratory and/or developmental grant program (R21). $194,602. (not funded)

Weimar, W.H. (2011). Motion Capture System for Animal and Human Research. OVPR Intramural Grant Program: Level 4. $75,000 ($45,000 Matching funds from College of Education, Department of Kinesiology and College of Veterinary Medicine). This funding allowed the Sport Biomechanics Laboratory to purchase the first three-dimensional motion capture *ever* in the Department of Kinesiology.

Pascoe, D. (Principal), Sefton, J. (Supporting), Weimar, W. (Supporting) (2010). Development of a multisystem imaging platform to coordinate diagnostic images for the purpose of improving assessment, treatment and diagnosis. Sponsored by NSF/NIH Major Equipment Grant, Federal.

Weimar, W. (2009). The push off the wall – A kinematic and kinetic analysis of approach and push-off strategies. USA Swimming. Funded ($15,000).

Overfelt, R, Weimar, W. & Chivukula, K. (2008). Bioeffects of Precision Electrical Shocks to Peripheral Nerves. Department of Defense Joint Non-Lethal Weapons Directorate. Funded ($120,000).

Weimar, W. (2005). Daniel F. Breeden Grant, Skill analysis as a teaching tool. Funded ($1398).

Blackburn, T. (co- principle) Weimar, W.H. (co-principle). The effects of trunk kinematics on knee kinematics and kinetics, and lower extremity EMG (2005) Centers for Disease Control and Prevention, Department of Health and Human Services Grants for New Investigator Training Awards for Unintentional Injury, Violence Related Injury, Injury Biomechanics, and Acute Injury Care Research. Funding requested:$99,617. Not funded.

Blackburn, T. (co- principle) Weimar, W.H. (co-principle). Influences of trunk flexion on knee joint kinetics and kinematics, and lower extremity EMG (2005) National Athletic Trainers' Association Research and Education Foundation General Grant Program. Funding Requested: $130,200. Not funded.

Davis, GA, Carnahan, B and Weimar, W. (2004). Equipment grant from the Deep South Center for Occupational Safety & Health (DSC). Grant funded for $20,000 to purchase advanced Balance Master system based on previous research results.

Weimar, W., Martin, E. & Rudisill, M. (2004). NIH Funding: RFA#: CA-04-009, Mechanisms of Physical Activity Behavior Change: The role of balance in physical activity of young children. Not Funded.

Rudisill, M.E., Weimar, W.H., Martin, E. H., Buchanon, A., Jackson, E. (2004). College of Education Grant. Secured $4,000 to hire a person to write grant for NIH regarding physical activity and children.

Weimar, W.H. Martin, E.H. Cue Words and Skill Performance, AAHPERD Collaboration Grant, (2000, 2002, 2003, 2004). $8500. Not funded.

Weimar, W.H. (PI) & Carnahan, B.J. (Co-Investigator). A Classification Model of Stability (2000). NIH: Department of Health and Human Services, Public Health Service. Funding requested: $106,408. Not funded

Weimar, W.H. (PI) & Carnahan, B.J. (Co-Investigator). (1999). Understanding Balance. NSF 99-168 Pre- proposal. $123,962. Not funded.

# Intellectual Contributions

## Copyrights

These copyrights are outgrowths of my teaching. In addition, to research, I feel that intellectual contribution is extremely important and maintains my commitment to the Mission of the Department of Kinesiology.

Copyright, "Using Dartfish(c) Motion Analysis to Evaluate & Educate Collegiate Conducting Students," New Technology Disclosure No. 10-076, Provisional, United States. (submit: June 2010).

Copyright. “Cross-Sectional Anatomy: A Teaching Tool.” New Technology Disclosure No. 8-034, Provisional, United States. (submit: June 2008).

## Patents

These intellectual properties are the outgrowth of research projects conducted in the Sport Biomechanics Laboratory. By fostering an environment of creativity, unique solutions to problems can be identified and developed.

US Patent 9,437,175, “Anterior Load Carriage Stability & Mobility Support System”, Issued September 6, 2016.

US Patent Application 15/252,724, “Anterior Load Carriage Stability & Mobility Support System”, filed August 31, 2016, published as 20160372093 on December 22, 2016.

Patent, Insertable safety toe box, Provisional, United States.

Patent, Thong flip-flop sandal with adjustable straps, AU Technology Disclosure No. 10-072, Provisional, United States.

Patent, Adjustable bladder for a sport slide style flip-flop /sandal, 61/358,270, Provisional, United States. (submit: June 2010).

Patent, Balance Challenging Shoes - Altering the pivot point of toning, fitness shoes. AU Technology Disclosure No. 10-078, Provisional, United States. (submit: June 2010).

Patent, "Thong flip-flop sandal with air bladder in straps," 61/353,497, Provisional, United States. (submit: June 2010).

# Creativity:

# Push/Pull Pre-school fitness assessment tool

# Pre-school wagon pull fitness assessment tool

# Pre-school ramp run fitness assessment tool

# Underwater Camera Robot

Pitching Device

Hitting timing tool

Turf tester – this is being revised and expanded. It will be implemented in Shaw Industries project.

# OUTREACH

**Technical Assistance**

Developed and Directed the Speed and Agility Camp (2013).

Auburn University Swimming and Diving Team: I have been a biomechanics and martial art consultant for the Auburn University Men’s and Women’s Swimming Team since 2002. During this time the team has valued my contribution enough to award me with 3 National Championship Rings and 2 SEC Championship Rings.

AU Softball Team: I have been working with the softball team since 2007. The main focus of our contribution has been to the hitting mechanics

AU Track Team: I have been working with the track team since 2008. The main focus of our contribution has been to the sprinters and jumpers. We have provided high speed video analyses of several high performance athletes.

Movement Analyses – For Auburn University faculty, staff and surrounding community

NFL Football Player Assistance – 4

Pathological gait -6

Running gait analyses - 4

Total:

Walking – 46

Running - 15

Golf swing- 14

Specific sport analyses for Olympic or professional athletes

Kerron Stewart-sprinting

Mark Gangloff – swimming

Kevin Pompey – boxer

Lionel Moreau-swimming

Fredrick Bousquet - swimming

 Kirsty Coventry - swimming

César Cielo - swimming

Eileen Coparropa - swimming

Margaret Hoelzer - swimming

Matt Targett - swimming

George Bovell - swimming

Mark Burns - sprinting

Levan Sands – triple jumper

Consultant for local high school teams

Assisted in the development of the Kenny Howard Fellowship: Rehabilitation shoulder exercises CD. This interactive video manual demonstrates how to perform the exercises and critical components of each exercise. It is designed to assist the physical therapist, the athletic trainer as well as the patient.

US Army:

Cadre Presentation – how to evaluate and improve running gait: 2011-Present

Fun Run – provided running gait analyses for members of the U.S Army and their families involved in fun run day events: 2010 – 2011

PRT Manual Instruction: Development of an interactive video manual of the U.S. Army Physical Readiness Training handbook: January 2010 - 2011

Gait Improvement Mentoring Program: Development of an interactive gait analysis program designed to train the trainer. Specifically, this project trains the Drill Sergeants to observe and evaluate the running gaits of incoming recruits. This project has been implemented on more than 30,000 recruits:

2010 - Present

Grenade throwing: The development of a grenade throwing interactive video manual. 2010 - 2011

Ranger Battle Plan Instruction: The development of an interactive video manual of Ranger Battles Plans. January 2010 – 2011

# SERVICE

**University Service**

## Auburn University

Canine Detection Research Institute, (2009 - Present)

The Occupational Safety Ergonomics and Injury Prevention Program, (2007 –

Present)

Phi Kappa Phi Scholarship Committee, (2006 - 2010)

Research forum judge, (2009-Present) Invited Speaker

Women of the academy 4 Lectures

Honors College (2017, 2018, 2019)

## Department

Faculty Search Committees (2002, 2008, 2009, 2010, 2011, 2013, 2016)

Exercise Science Coordinator (2014-Present) Distance Learning Committee, (2000 - Present) SACS Coordinator, (2000-Present)

Co-author Physical Conditioning and Performance degree plan (2011)

Provided video and photos for the Department of Kinesiology’s Physical Activity Portal

Assisted in the development of the Performance and Health Optimization Center

# Professional Service

 Founding member and inaugural President of the Southeastern ACSM Biomechanics

Interest Group (2019)

Board member, Kenny Howard Fellowship, Auburn, AL. (2004 - Present) Consultant, Warrior Research Center/Athletic Training, Ft Benning, Ga. Grant Reviewer: NSF Phase II proposals (2016-Present)

Reviewer:

Journal of Applied Biomechanics (2010-Present)

Sport Biomechanics (2012-Present)

Physical Education and Sport Pedagogy (2011 - Present)

Journal of Biomechanics. (2008 - Present)

Research in Sports Medicine: An International Journal. (2008 - Present)

Adapted Physical Education Quarterly. (2007 - Present)

Research in Swimming. (2006 - Present)

Physical Education and Sport Pedagogy (2011 - Present)

Abstract Reviewer, American Society of Biomechanics Annual Conference, (2013, 2015, 2018, 2020)

Abstract Reviewer, Southeast American College of Sports Medicine Annual Conference, (2011, 2013)

Session Chair, Southeast American College of Sports Medicine, Greenville, South Carolina (2010, 2020).

Recruiter, Historically Black Colleges and Universities, Atlanta, Ga. (2008 - Present)

Biomechanics Consultant Discovery Channel Production of Xtreme Martial Arts

Professional Witness/Biomechanics/Forensics Consultant

Guest lecturer:

Georgia State University (2)

Columbus State University (2)

 Univ of N. Illinois (2018, 2019, 2020)

 Miss. State (2020)