

# CURRICULUM VITAE

**SARAH E. DEEMER**  
**sdeemer@uab.edu**

## EDUCATION & TRAINING

### *Postdoctoral Fellow*

The University of Alabama at Birmingham – Nutrition Obesity Research Center

(2017 – present)

Department of Nutrition Sciences

Mentors: Dr. Barbara Gower and Dr. Eric Plaisance

### *Doctor of Philosophy*

Texas Woman's University

(complete: May 2017)

Department of Kinesiology, Concentration: Exercise Physiology & Nutrition Sciences

Advisor: Dr. Kyle Biggerstaff

Colorado State University (no degree obtained)

Department of Health & Exercise Science, Concentration: Human Bioenergetics

Co-Advisors: Dr. Matt Hickey & Dr. Chris Melby

### *Master of Science*

The University of Texas at El Paso

(complete: May 2008)

Department of Kinesiology, Concentration: Applied Exercise Science

Advisor: Dr. George King

### *Bachelor of Science*

The University of Texas at El Paso

(complete: May 2004)

Major: Kinesiology, Concentration: Exercise Science

Minor: Biology

## **Related Professional Training**

Vanderbilt University – National Mouse Metabolic Phenotyping Center

10th Annual Course on Isotope Tracers in Metabolic Research (November 2017)

TOS Pre-Conference Workshop: Approaches to Studying Mouse Models of Obesity (November 2018)

UAB Center for Clinical and Translational Science (CCTS)

Rigor, Reproducibility, & Transparency (R2T) Training (August 2018)

UAB Office of Postdoctoral Education – Laboratory Management Course (September/October 2018)

LSU Pennington Biomedical Research Center – Nutrition Obesity Research Center

Training in Nutrition and Obesity Research Methods (September 2019)

## **Professional Certification/Licensure**

National Strength and Conditioning Association – Certified Strength and Conditioning Specialist (February 2006)

Medtexx Medical Corporation – Phlebotomy Certification (May 2008)

## Membership in Professional Organizations

2004 – present	American College of Sports Medicine
2004 – present	National Strength & Conditioning Association
2008 – 2017	Endocrine Society
2011 – 2013	American Society for Nutrition
2014 – 2017	American Physiological Society
2018 – present	The Obesity Society

## SCHOLARSHIP/CREATIVE ACHIEVEMENTS

### Refereed Publications

1. Castleberry, TJ, C Irvine, **SE Deemer**, MF Brisebois, R Gordon, M Oldham, J Ramirez, A Duplanty, & V Ben-Ezra. Consecutive Days of Exercise Decrease Insulin Response More Than a Single Exercise Session in Healthy, Sedentary Men. *European Journal of Applied Physiology* [E-Pub ahead of print], 2019. [\[link\]](#)
2. **Deemer, SE**, RAH Davis, BA Gower, AP Koutnik, AM Poff, SL Dickinson, DB Allison, DP D'Agostino, & EP Plaisance. Concentration-Dependent Effects of a Dietary Ketone Ester on Components of Energy Balance in Mice. *Frontiers in Nutrition* 6:56, 2019. [\[link\]](#)
3. Davis, RAH, **SE Deemer**, JM Bergeron, JT Little, JL Warren, G Fisher, DL Smith, KR Fontaine, DB Allison, & EP Plaisance. Dietary R,S-1,3-butanediol diacetoacetate reduces body weight and adiposity in obese mice fed a high-fat diet. *The FASEB Journal* 33(2): 2409–2421, 2019. [\[link\]](#)
4. **Deemer, SE**, T Castleberry, C Irvine, DE Newmire, M Oldham, GA King, V Ben-Ezra, BA Irving, & KD Biggerstaff. An Acute Bout of High Intensity Interval Exercise Increases 12.5h GH Secretion. *Physiological Reports* 6(2): e13563, 2018. [\[link\]](#)
5. King, GA, **SE Deemer**, DL Thompson. Adiponectin is associated with risk of the metabolic syndrome and insulin resistance in women. *Acta Diabetologica* 49(Suppl 1): 41-49, 2012. [\[link\]](#)
6. **Deemer, SE**, GA King, S Dorgo, CA Vella, JW Tomaka, & DL Thompson. Relationship of Leptin, Resting Metabolic Rate, and Body Composition in Pre-menopausal Hispanic and non-Hispanic White Women. *Endocrine Research* 35(3): 95-105, 2010. [\[link\]](#)
7. King, GA, **SE Deemer**, & DL Thompson. Relationship between Leptin, Bone Mineral Density, and Measures of Adiposity among Pre-menopausal Hispanic and Caucasian Women. *Endocrine Research* 35(3): 106-117, 2010. [\[link\]](#)

### Manuscripts in Press

## Manuscripts in Peer Review

1. **Deemer, SE**, RAH Davis, DL Smith, & EP Plaisance. Exogenous Dietary Ketone Ester Decreases Body Weight and Adiposity in Mice Housed at Thermoneutrality. *Obesity* (Manuscript#: 19-0872-Orig).
2. **Deemer, SE**, DL Smith Jr., DL Thompson, GA King. Comparison of Body Composition Estimates in Hispanic-American Women by Dual-Energy X-Ray Absorptiometry and Hydrostatic Densitometry. *Applied Physiology, Nutrition, and Metabolism* (Manuscript#: apnm-2019-0644).
3. Newmire, DL, E Rivas, **SE Deemer**, D Willoughby, V Ben-Ezra. L-Isoleucine Increases Glucose-Dependent Insulinotropic Peptide Concentrations in Healthy, Inactive Adults. *Metabolism: Clinical and Experimental* (Manuscript#: METABOLISM-D-19-00961).

## Manuscripts Currently in Preparation

1. **Deemer, SE**, MS Hickey, GA King, & CL Melby. The relationship between small LDL particle concentration and insulin sensitivity in Mexican-American women.
2. **Deemer, SE**, S Uranga, & GA King. Association of Sex-Hormone Binding Globulin with Markers of the Metabolic Syndrome and Cardiovascular Disease in Hispanic Pre-Menopausal Women.
3. Castleberry, TJ, C Irvine, M Brisebois, **SE Deemer**, R Gordon, A Henderson, V Ben-Ezra. 20 and 30 Grams of Whey Protein Do Not Decrease Glucose Responses Following an Oral Glucose Tolerance Test.

## Non-Refereed Publications or Other Creative Achievements

1. King, GA, S Dorgo, & **SE Deemer**. Body Composition: How to measure it; What does it mean. ACSM Fit Society Page, Winter 2006-2007 – “The Health Club” p. 5-6.
2. King, GA & **SE Deemer** (2005). Encouraging Physical Activity in the Elderly. *El Paso Physician* 28(5):5.

## Invited Presentations

1. **Deemer, SE**. *The Effect of Dietary Macronutrient Composition on Adipose Tissue Remodeling and Metabolic Health*. Emerging Luminaries: Rising Stars in Nutrition, Exercise, and Metabolism. Indiana University, School of Public Health; Bloomington, IN, September 27, 2019.
2. **Deemer, SE**. *Influence of Dietary Fat and Ketone Esters on Energy Expenditure and UCP1 Expression in Brown Adipose Tissue (BAT)*. TOS Opening Session; Awards & Early Career Grant Challenge Competition. Annual Conference of the Obesity Society, Obesity Week 2018; Nashville, TN, November 12, 2018.
3. **Deemer, SE**. *Ketone Esters Decrease Body Weight and Adiposity at Thermoneutrality in Male Mice*. TOS Basic Science and Beer Lightning Talks. Annual Conference of the Obesity Society, Obesity Week 2018; Nashville, TN, November 13, 2018.
4. **Deemer, SE**. *High-Intensity Interval Exercise Does Not Influence Overnight GH Secretion in Overweight Sedentary Young Women*. President’s Cup Competition at the Annual Meeting of the American College of Sports Medicine; Denver, CO, May 31, 2017.
5. **Deemer, SE**. *HIIT: Feel the Burn, Lose the Fat?* International Symposium in Kinesiology and Exercise Science Research at Baylor University; Waco, TX, October 13, 2016.

## Refereed Abstracts & Presentations at Professional Meetings

1. **Deemer, SE**, BM Roberts, RAH Davis, AP Koutnik, AM Poff, MB Brown, DL Smith, Jr., BA Gower, DP D'Agostino, & EP Plaisance. **A ketone ester (BD-AcAc<sub>2</sub>) added to diet results in weight loss and prevents weight gain in male mice.** Annual Conference of the Obesity Society, Obesity Week 2019; Las Vegas, NV, November 7, 2019 (Poster Presentation).
2. **Deemer, SE**, RAH Davis, DL Smith Jr., EP Plaisance. **R,S-1,3-Butanediol Diacetate Decreases Body Weight and Adiposity in Mice Housed at Thermoneutrality.** Annual Conference of the Obesity Society, Obesity Week 2018; Nashville, TN, November 15, 2018. (Poster Presentation)
3. **Deemer, SE**, RAH Davis, JM Bergeron, JT Little, JL Warren, G Fisher, EP Plaisance. **Dietary Ketone-Mediated Increases in Energy Expenditure are Independent of Changes in Skeletal Muscle Mitochondrial Respiration.** *Medicine & Science in Sports & Exercise*, 50:S5, 2018. National Conference of the American College of Sports Medicine; Minneapolis, MN, May 30, 2018. (Poster Presentation).
4. **Deemer, SE**, T Castleberry, C Irvine, M Mathis, DE Newmire, M Oldham, M Rao, J Yi, DL Nichols, V Ben-Ezra, KD Biggerstaff. **High-intensity interval exercise does not influence overnight GH secretion in overweight sedentary young women.** Annual Meeting of the Texas Chapter of the American College of Sports Medicine; Waco, TX, February 16-17, 2017. (Poster Presentation).
5. **Deemer, SE**. **The Influence of high-intensity interval training on basal pulsatile growth hormone secretion patterns in overweight/obese women.** Annual meeting of the Texas Chapter of American College of Sports Medicine; Austin, TX, February 27, 2015. (Oral Presentation).
6. **Deemer, SE**, MS Hickey, GA King, CL Melby. **The relationship between small LDL particle concentration and insulin sensitivity in Mexican-American women.** *Medicine & Science in Sports & Exercise*, 46:S305, 2014. National Conference of the American College of Sports Medicine; Orlando, FL, May 29, 2014. (Thematic Poster).
7. **Deemer, SE**, V Ben-Ezra, GS King, MS Hickey, CL Melby. **Effect of omega-3 fatty acids on lipid profile and lipoprotein particle size in Hispanic women.** *The FASEB Journal*, 28(suppl 1): 642.2, 2014. Experimental Biology 2014; San Diego, CA, April 27, 2014 (Poster Presentation).
8. **Deemer, SE**, GA King, MS Hickey, & CL Melby. **High Molecular Weight Adiponectin and Fasting Blood Glucose are Predictive of Insulin Sensitivity in Healthy, Hispanic Women.** *Medicine & Science in Sports & Exercise*. 45:S333, 2013. National Conference of the American College of Sports Medicine; Indianapolis, IN, May 30, 2013. (Poster Presentation).
9. **Deemer, SE**, GA King, MS Hickey, CL Melby. **Omega-3 fatty acid supplementation does not alter insulin sensitivity or serum adiponectin in healthy Hispanic women.** *The FASEB Journal*, 27:1057.8, 2013. Experimental Biology, 2013; Boston, MA, April 23, 2013 (Poster Presentation).
10. **Deemer, SE**, GA King, V Castro, F Ibarra, A Jacquez, D Ponce, M Rodriguez, E Venegas, CL Melby, & MS Hickey. **Fasting Blood Glucose is Significantly Associated with Metabolic Inflexibility in Hispanic Women.** *Medicine & Science in Sports & Exercise*, 44:S421-422, 2012. National Conference of the American College of Sports Medicine; San Francisco, CA, May 31, 2012. (Poster Presentation).
11. **Deemer, SE** & GA King. **Association of Sex-Hormone Binding Globulin with Markers of the Metabolic Syndrome and Cardiovascular Disease.** *Medicine & Science in Sports & Exercise*, 43:S72, 2011. National Conference of the American College of Sports Medicine; Denver, CO, June 1, 2011. (Slide Presentation).
12. **Deemer, SE**, GA King, & DL Thompson. **Effect of Acute Exercise on Insulin Concentration of Obese and Non-Obese Post-Menopausal Women.** *Medicine & Science in Sports & Exercise*, 42:S339-340, 2010. National Conference of the American College of Sports Medicine; Baltimore, MD, June 2, 2010. (Poster Presentation).

13. **Deemer, SE**, GA King, DL Thompson. **Adiponectin is Inversely Associated with Insulin Resistance and Metabolic Syndrome in Premenopausal Non-Diabetic Women.** *Medicine & Science in Sports & Exercise*, 41:S54, 2009. National Conference of the American College of Sports Medicine; Seattle, WA, May 28, 2009. (Slide Presentation).
14. King, GA, **SE Deemer**, S Dorgo, DL Thompson. **Adiponectin Concentrations are Associated with Cardiovascular Disease Risk Factors in Premenopausal Women.** *Medicine & Science in Sports & Exercise*, 41:S54, 2009.
15. Lonac, MC, JC Richards, **SE Deemer**, TK Johnson, MM Schweder, RJ Supon, C Bell. **Epigallocatechin-3-gallate (EGCG) Advances the Onset of the Ventilatory Threshold but Does Not Affect Maximal Oxygen Uptake.** *Medicine & Science in Sports & Exercise*, 41:S368, 2009.
16. **Deemer, SE**, BM Franco, C Potter, S Dorgo, GA King. **Accuracy of an Armband Type Physiological Body Monitor to Estimate Light/Sedentary Activities of Daily Living.** *Medicine & Science in Sports & Exercise*, 40:S207, 2008. National Conference of the American College of Sports Medicine; Indianapolis, IN, May 28, 2008. (Poster Presentation).
17. King, GA, **SE Deemer**, S Dorgo, DL Thompson. **Influence of Visceral Adiposity and Triglycerides on Insulin Resistance in Pre-Menopausal Caucasian and Hispanic Women.** *Medicine & Science in Sports & Exercise*, 40:S227, 2008.
18. Dorgo, S, GA King, & **SE Deemer**. **Effects of Functional Training in an Older Adult Fitness Program.** *Research Quarterly for Exercise and Sport*, 79:A-13, 2008.
19. **Deemer, SE**, C Potter, GA King, DL Thompson. **Relationship of Leptin, Resting Metabolic Rate, and Body Composition in Pre-Menopausal Hispanic and Caucasian Women.** *Medicine & Science in Sports & Exercise*, 39:S455, 2007. National Conference of the American College of Sports Medicine; New Orleans, LA, June 1, 2007. (Poster Presentation).
20. King, GA, **SE Deemer**, C Potter, DL Thompson. **Relationship Between Leptin, Bone Mineral Density, and Fat Mass in Pre-Menopausal Hispanic and Caucasian Women.** *Medicine & Science in Sports & Exercise*, 39:S456, 2007.
21. King, GA, S Dorgo, & **SE Deemer**. **The Application of Peer-Mentoring in a Physical Fitness Program for Older Adults.** *Journal of Strength and Conditioning Research*, 21:e23, 2007.
22. King, GA, S Dorgo, & **SE Deemer**. **Sex Difference in Muscular Strength Initiated by Two Different Resistance Training Programs.** *Journal of Strength and Conditioning Research*, 21:e37, 2007.
23. **Deemer, SE**, BM Franco, C Potter, CG Sifuentes, CA Spence, GA King. **Evaluation of a Foot-to-Foot Bioelectrical Impedance Analyzer in Pre-menopausal Hispanic and Caucasian Women.** *Medicine & Science in Sports & Exercise*, 38:S310, 2006. National Conference of the American College of Sports Medicine; Denver, CO, June 1, 2006. (Poster Presentation).
24. King, GA, **SE Deemer**, C Potter, CA Spence, BM Franco, CG Sifuentes. **Assessment of Body Fatness by Dual Energy X-ray Absorptiometry and Hydrodensitometry.** *Medicine & Science in Sports & Exercise*, 38:S311, 2006.
25. Potter, C, **SE Deemer**, CG Sifuentes, KJ Coleman, GA King. **Accuracy of an Armband Type Physiological Body Monitor to Estimate Walking Energy Expenditure in Children.** *Medicine & Science in Sports & Exercise*, 38:S208, 2006.
26. King, GA, **SE Deemer**, BM Franco, C Potter, & KJ Coleman. **Accuracy of Three Physical Activity Monitors to Measure Energy Expenditure during Activities of Daily Living.** *Medicine & Science in Sports & Exercise*, 37:S115, 2005.

## Honors and Awards

2019 University of Alabama at Birmingham, 2019 Post-Doc Research Day Winner (1<sup>st</sup>): *Exogenous Dietary Ketone Esters Decrease Body Weight and Adiposity in Mice Housed at Thermoneutrality*.

2018 The Obesity Society – Early Career Research Grant Challenge Finalist: *Influence of Dietary Fat and Ketone Esters on Energy Expenditure and UCP1 Expression in Brown Adipose Tissue*

2018 University of Alabama at Birmingham, Nutrition Obesity Research Center: New Obesity, Metabolism, and Energetics Ideas for the New Year Winner (“Best Presentation” & “Best in Show”)

2018 University of Alabama at Birmingham, 2018 Post-Doc Research Day Winner (3<sup>rd</sup>): *Dietary Ketone-Mediated Increases in Energy Expenditure are Independent of Changes in Skeletal Muscle Mitochondrial Respiration*.

2017 Federation of North Texas Area Universities 8<sup>th</sup> Annual Graduate Research Symposium – Science, Technology, Engineering, and Math Poster Winner (1<sup>st</sup>): *High-intensity interval exercise does not influence overnight GH secretion in overweight sedentary young women*.

2017 Texas Chapter of the American College of Sports Medicine – Doctoral Level Poster Winner (1<sup>st</sup>) & President’s Cup Competition Winner: *High-intensity interval exercise does not influence overnight GH secretion in overweight sedentary young women*.

2016 Texas Chapter of the American College of Sports Medicine – Manuscript Award Winner (4<sup>th</sup>): *Effect of Omega-3 Fatty Acids on Insulin Action, Adiponectin, Lipid Profile, and Lipoprotein Particle Size in Non-Diabetic Mexican American Women*.

2015 Texas Chapter of the American College of Sports Medicine – Doctoral Student Research Development Award Winner (top 4): *The Influence of High-Intensity Interval Training on Basal Pulsatile Growth Hormone Secretion Patterns in Overweight/Obese Women*.

2014 Texas Chapter of the American College of Sports Medicine – Doctoral Level Poster Winner (3rd): *Effect of Omega-3 Fatty Acids on Lipoprotein Profile and Particle Size in Hispanic Women*.

2008 Texas Chapter of the American College of Sports Medicine – Master’s Level Poster Winner (3rd): *Effect of Chronic Hydration Status on Fluid Regulation during Prolonged Cycling in the Heat: Preliminary Data*.

2007 Texas Chapter of the American College of Sports Medicine – Master’s Level Poster Winner (1st): *Relationship of Leptin, Resting Metabolic Rate, and Body Composition in Pre-Menopausal Hispanic and Caucasian Women*.

Federation of American Societies for Experimental Biology (FASEB)/ Minority Access to Research Careers (MARC) – Program Poster/Oral Presentation Student Travel Award (\$1,850)

- ACSM Annual Meeting (2007, 2008, 2009, 2010, 2012, 2013, 2014)
- Experimental Biology (2013, 2014)

Invited to attend the FASEB Leadership Development & Grant Writing Seminar Program for Graduate Students and Postdocs/New Assistant Professors; Virginia Beach, VA: August 26-27, 2011.  
Travel award funded by the National Institute of General Medical Sciences (NIGMS).

Invited to attend The HUTEP Institute on Post-doctorate Preparation; El Paso, TX: September 24-26, 2009. Sponsored by Howard University and the University of Texas at El Paso AGEP Program and in cooperation with the National Postdoctoral Association. Funded by National Science Foundation.

Frank B. Cotton Memorial Graduate Scholarship, University of Texas at El Paso (2005-2006)

University of Texas at El Paso – Graduate Enhancement Scholarship (2005-2006)

Western Athletic Conference (WAC) Scholar-Athlete Award (2001-2002)

## Fellowships

2017 – 2019 UAB Obesity Postdoctoral Training Program (T32DK062710) funded by the National Institute of Diabetes and Digestive and Kidney Diseases

2008 – 2009 National Science Foundation – Alliance for Graduate Education and the Professoriate (AGEP) Fellowship; Colorado State University. National Science Foundation for Graduate Students Award #PO0000062901: \$15,000

## Grants

National Institute of Health/NIDDK – Diversity Supplement to UAB NORC

*The Influence of a Hypocaloric Low-Carbohydrate or Low-Fat Diet on Adipose Tissue Remodeling and Gene Expression in Obese African American Women;* \$215,000

Role: PI (funded, 2019 - 2021)

University of Alabama at Birmingham – NORC Pilot & Feasibility Grant Program

*The Influence of a Hypocaloric Low-Carbohydrate or Low-Fat Diet on Adipose Tissue Remodeling and Gene Expression in Obese African American Women;* \$30,000

Role: PI (funded, 2019 – 2020)

The Obesity Society – Early Career Research Grant Challenge

*Influence of Dietary Fat and Ketone Esters on Energy Expenditure and UCP1 Expression in Brown Adipose Tissue;* \$25,000: submitted 08/18 (finalist, not funded)

National Strength & Conditioning Association – Pre-Doctoral Research Grant

*The Effect of Exercise Intensity on GH Secretion in Young, Sedentary Women;* \$15,000: submitted 07/16 (not funded)

TWU Quality Enhancement Program – Graduate Experiential Student Scholar Program Award.

*The Influence of Exercise Intensity on 12-hour Growth Hormone Response Following a Single Bout of Exercise in Sedentary Women;* \$2,000: Student Project Grant (funded, 2016 – 2017)

TWU Office of Research & Sponsored Programs – Research Enhancement Program

*Effect of high-intensity interval exercise on growth hormone in overweight women;* \$6,678

Role: Co-PI with KD Biggerstaff (funded, 2015 – 2016).

Texas Chapter of the American College of Sports Medicine – Student Research Development Award Winner

*The Influence of High-Intensity Interval Training on Basal Pulsatile Growth Hormone Secretion Patterns in Overweight/Obese Women;* \$1,000: Student Project Grant (funded, February 2015).

United States Department of Agriculture – Agriculture Environmental Station (CO)

*Effect of Omega-3 Fatty Acid Feeding on Metabolic Syndrome Risk Factors in Hispanic Women.*

\$50,000 Role: Co-PI with CL Melby (funded, 2009 – 2011).

NIH – Ruth L. Kirschstein National Research Service Award (NRSA) F31 Predoctoral Fellowship Award  
*Omega-3 Fatty acids, Adiponectin and Insulin Action in Hispanic Women*; \$68,000: submitted 12/09 (not funded)

Texas Chapter of the American College of Sports Medicine – Student Research Development Award  
*Effect of Chronic Hydration Status on Fluid-regulatory Hormone Response to Prolonged Exercise in the Heat*; \$500: Student Project Grant (funded, February 2006).

University of Texas at El Paso – Graduate Enhancement Funds Scholarship Award  
*Effect of Chronic Hydration Status on Fluid-regulatory Hormone Response to Prolonged Exercise in the Heat*; \$5,000: Student Project Grant (funded, 2005-2006).

Health Oriented Topics – H.O.T. Projects, Collegiate Project Assistance Initiative, Paso del Norte Health Foundation  
*Effect of Chronic Hydration Status on Fluid-regulatory Hormone Response to Prolonged Exercise in the Heat*; \$5,000: Student Project Grant (funded, 2005-2006).

Health Oriented Topics – H.O.T. Projects, Collegiate Project Assistance Initiative, Paso del Norte Health Foundation  
*Cross-Validation of Accelerometric Based MET Prediction Equations During Daily Activities Compared to Indirect Calorimetry*; \$2,238: Student Project Grant (funded, 2005-2006).

## TEACHING

### **Courses Taught at Texas Woman's University (2013 – 2017)**

#### *KINS 3601: Physiology of Exercise Laboratory*

- Developed current lab manual and taught exercise physiology lab techniques to sophomore- and junior-level undergraduate kinesiology majors.

#### *KINS 4601: Advanced Exercise Physiology Laboratory*

- Taught exercise stress testing, ECG placement and interpretation, and blood pressure techniques to senior-level undergraduate kinesiology majors.

#### *KINS 4701: Exercise Testing and Prescription for General and Special Populations Laboratory*

- Developed current lab manual and taught fitness assessment techniques to senior-level undergraduate kinesiology majors.

#### *KINS 4933: Internship in Cardiac Rehabilitation*

- Supervise undergraduate students completing their 350-h internship in a hospital-based cardiac rehabilitation setting and related activities.

#### *KINS 4943: Internship in Corporate Fitness*

- Supervise undergraduate students completing their 350-h internship in a corporate fitness setting and related activities.

## Courses Taught at the University of Texas at El Paso

(2011 – 2012)

### *KIN 4323: Current Issues: Exercise & Nutrition*

- Developed the course structure to teach undergraduate senior-level kinesiology students integrative physiology of energy metabolism and fuel utilization at rest and during exercise. Students were also asked to develop and design a nutrition- or exercise-centric simple research project, collect data and analyze using basic statistics, and have both a written and oral dissemination of results.

### *KIN 3331: Anatomical Kinesiology*

- Taught human anatomy and movement analysis to undergraduate kinesiology majors

### *KIN 3313: Statistics and Measurement in Kinesiology*

- Taught research design and statistical methods to undergraduate junior- and senior-level kinesiology majors. Statistical tests included: mean, median, mode, standard deviations, correlations, t-tests, and ANOVA.

### *KIN 4301: Personal Training*

- Taught personal training to undergraduate senior-level kinesiology students preparing for the NSCA's Certified Personal Training (CPT) Exam

## MENTORING

### University of Alabama at Birmingham – Mentoring & Leadership Certificate (*in progress*)

GRD 719	Introduction to Mentoring & Leadership	(Fall 2018)
GRD 746	Critical Decisions in Mentoring & Leadership	(Fall 2018)
GRD 713	Mentoring 101	(Fall 2019)
GRD 730	Developing and Managing Your Professional Image	(Fall 2019)

### Federation of American Societies for Experimental Biology (FASEB)/Maximizing Access to Research Careers (MARC) Peer Mentoring Program (2010-present)

- *Mentor undergraduate/graduate students at the Annual Biomedical Research Conference for Minority Students (ABRCMS), Experimental Biology, and the regional and national meeting(s) of the American College of Sports Medicine on presenting their scientific data, conference professionalism and networking skills. Additionally, as a peer mentor, I discuss the benefit of summer research opportunities and provide guidance and support to underrepresented minority students interested in pursuing careers in the biomedical sciences.*

### Texas Woman's University Exercise Physiology Laboratory Coordinator (2014 – 2017)

- *Mentor M.S. and Ph.D. students in specific biochemistry lab techniques (pipetting, basic phlebotomy skills, I.V. catheter insertion, colorimetric assays and ELISAs, MAGPIX, etc...) that are required to accurately collect thesis and dissertation data*
- *Mentor undergraduate laboratory volunteers and teach them basic laboratory techniques and data collection procedures*
- *Review and edit student IRB proposals*
- *Maintain organization of the exercise physiology lab and laboratory equipment as well as troubleshoot equipment malfunctions*

Master's Thesis Committees

2018 **Selina Uranga**, Department of Kinesiology (The University of Texas at El Paso)

Role: Outside Committee Member

Status: Complete (May 4)

*Association between Inflammatory and Anti-Inflammatory Biomarkers, and Sex Hormone Binding Globulin in Premenopausal Women*

**PROFESSIONAL SERVICE**

Southeast Chapter of the American College of Sports Medicine

2018 – present

- Tutorial and Symposium Abstract Reviewer for 2019 SEACSM Annual Meeting

UAB Postdoctoral Association Executive Board

2018 – present

Founder, “Friday Night Pints”

2018 – present

- *A semi-monthly journal club designed to embrace the collaborative spirit of UAB. This journal club is open to all interested individuals from both UAB and UAB Medicine and covers a variety of topics in the field of obesity-related research.*

Editor, Obesity and Energetic Offerings

2017 – present

Contributor, Obesity and Energetic Offerings

2017 – present

TWU Exercise Science Faculty Search Committee student member

Fall 2016/Spring 2017

Ad Hoc Manuscript Reviewer:

- American Journal of Clinical Nutrition
- European Journal of Applied Physiology
- International Journal of Exercise Science
- Journal of Applied Physiology
- Obesity
- PLOS One

## PROFESSIONAL REFERENCES

	<i>Email</i>	<i>Phone</i>
<u>Post-doctoral mentors:</u>		
Barbara A. Gower, PhD	( <a href="mailto:bgower@uab.edu">bgower@uab.edu</a> )	205-934-4087
Eric P. Plaisance, PhD	( <a href="mailto:plaisep@uab.edu">plaisep@uab.edu</a> )	205-996-7909
Daniel L. Smith, PhD	( <a href="mailto:dsmithjr@uab.edu">dsmithjr@uab.edu</a> )	205-934-4086
<u>Doctoral program research mentors:</u>		
Vic Ben-Ezra, PhD	( <a href="mailto:vbenezra@twu.edu">vbenezra@twu.edu</a> )	940-898-2597
Kyle D. Biggerstaff, PhD (chair)	( <a href="mailto:kbiggerstaff@twu.edu">kbiggerstaff@twu.edu</a> )	940-898-2596
<u>Doctoral program teaching mentor:</u>		
Barbara Barnick-Ben-Ezra, PhD	( <a href="mailto:bbenezra@twu.edu">bbenezra@twu.edu</a> )	940-898-2340
<u>Undergraduate &amp; Master's Program research/teaching mentor:</u>		
George A. King, PhD	( <a href="mailto:gking6@twu.edu">gking6@twu.edu</a> )	940-898-2576