# Heidi A Kluess, Ph.D., FACSM, CCFT

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#### **Education:**

Ph.D. in Kinesiology from Louisiana State University, Baton Rouge, Louisiana, 2002 M.S. in Exercise and Sport Sciences from the University of Florida, Gainesville, Florida, 1997 B.S. in Exercise and Sport Sciences from the University of Florida, Gainesville, Florida, 1995

# **Academic Appointments and Post-doctoral Experience:**

# Associate Professor, School of Kinesiology

Auburn University, August 2013-present

# **Assistant Professor, Department of Kinesiology**

Auburn University, August 2011-August 2013

# Assistant Professor, Cell and Molecular Biology Program

University of Arkansas, August 2008-August 2011

# Assistant Professor, Department of Health Science, Kinesiology, Recreation, and Dance

University of Arkansas, August 2007-August 2011

#### **Instructor, Department of Anesthesiology**

Medical College of Wisconsin, July 2006-August 2007

# Postdoctoral Fellow, Department of Anesthesiology

Medical College of Wisconsin, June 2003-July 2006

## Research Associate, Department of Physiology and Biophysics

University of Illinois at Chicago, June 2002-May 2003

## Adjunct Instructor, Anatomy and Physiology

Santa Fe Community College, Summer 1997

### **Professional Affiliation:**

Southeast Chapter of the American College of Sports Medicine, 2012-present American Association for the Advancement of Science, 2006-present American Physiological Society, 2003-present American College of Sports Medicine, 1994-present

# **Undergraduate Teaching:**

Auburn University

Introduction to Exercise Science Research KINE 4760, Spring 2015, Fall 2016, Summer 2019, Fall 2019, coordinated content Fall 2016-Spring 2016, Summer and Fall 2019, 2020, Fall 2021, Summer and Fall 2022

Exercise Science Research KINE 4780, Spring 2016, 2017, 2018, 2020, 2021, 2022, 2023

**Physiology of Exercise KINE 3680**, Fall 2011-Summer 2016, Summer 2017, 2018, 2019, 2020, 2021, 2022, Fall 2020, Spring 2023

Physiology of Aging KINE 4970: Special Topics, Fall 2012

University of Arkansas

Seminar in Exercise Science KINS2733, Fall and Spring 2008 to present Laboratory Techniques KINS3533, Spring and Summer 2008, Summer 2009 Analytical Basis of Movement Science KINS4323, Spring 2010

Louisiana State University

Principles of Conditioning KIN 2504, Fall and Spring 1998–2002 Scientific Basis for Exercise Testing and Prescription KIN 3534, Fall 1998 - Fall 2000 Personal and Community Health KIN 1600, Fall 1997 - Summer 1998

Santa Fe Community College

Anatomy and Physiology I, Summer 1997

# **Graduate Teaching:**

**Auburn University** 

Advanced Physiology of Exercise I, KINE7680, Spring 2020, 2021, 2022, 2023, Summer 2020, 2021 Advanced Physiology of Exercise II, KINE7700, Spring 2020

**Research Methods in Physical Activity, KINE 7010**, Fall 2013, 2014, Summer 2014, 2015, 2016, Fall 2015, 2016, 2017, 2018

Scientific Writing KINE7950 or Scientific Communication 8710, Spring 2013 to 2019 Putting your Ph.D. to work: Getting a job after school, KINE 8970, Summer 2014 Sympathetic Vasoconstriction During Exercise KINE 8970, Summer 2013 Physiology of Aging KINE 7970, Fall 2012

University of Arkansas

Physical Dimensions of Aging KINS 5613 (HKRD 699V), Spring 2011 Practicum in Lab Instrumentation KINS 5593, Fall 2008, 2009, 2010, Summer 2010 Cardiovascular Function during Exercise KINS5543, Fall 2007

Medical College of Wisconsin

Medical Physiology Lab: Circulatory control mechanisms in the dog, Spring 2004-Spring 2007

#### **Public Outreach:**

"Canine fitness: getting started" for the Kennesaw Kennel Club, September 14, 2021.

"The human-animal bond in canine sports" for the Pembroke Welsh Corgi Club of Greater Atlanta, June 23, 2021

"Strength and Conditioning for the Everyday Dog" for the Columbus Kennel Club, Columbus, GA April 16, 2019

"Exercise is Medicine" for the Auburn Rotary Club, June 12, 2013 Opelika, AL and for the Speaker of

- the Month for the City of Auburn Parks and Recreation Department, December 12, 2013.
- "Women and Cardiovascular Disease: What we know and where we are going " for the 2009 Arkansas Health Disparities Conference: Promoting Health Equity in Arkansas. University of Arkansas. April 3, 2009.
- "Academic Interview Experiences" as part of a symposium entitled "Insights from the Academic Interview Trail" for the Spotlight on Science Symposium Series Medical College of Wisconsin, June 2006.

#### **Invited Lectures:**

- "A Comparison of Owner Reported Feeding and Body Condition in Pet and Sport Dogs: Sources of Dog Obesity" for the Association of Professional Dog Trainers Annual Conference, Dayton Beach, FL October 2022. Presented by Heidi Kluess.
- "A Comparison of Owner Reported Exercise and Body Condition in Pet and Sport Dogs: Sources of Dog Obesity" for the Association of Professional Dog Trainers Annual Conference, Dayton Beach, FL October 2022. Presented by Rebecca Jones.
- "The Human-Animal Bond in Canine Sports" for the Dog Research at Auburn University Conference, Auburn AL April 23, 2021.
- "Dipeptidyl Peptidase IV: a non-classical serine protease with diverse functions" for the Department of Medical Biophysics, Schulich School of Medicine and Dentistry, Western University, London Ontario, Canada. May 20, 2015.
- "Sympathetic neurotransmission in skeletal muscle arterioles" for the Department of Kinesiology at the University of Texas at Arlington, March 30, 2011.
- "Environmental of Sympathetic Neurotransmission" for the Department of Biology Seminar Series, University of Arkansas. March 26, 2009.
- "Sympathetic vasoconstriction and the interstitial environment"

Midwestern University, April 19, 2006

- "Sympathetic vasoconstriction, exercise, and the interstitial environment" Louisiana State University, October 22, 2004
- "Peripheral Vascular Disease for Exercise Prescriptions for Special Populations" Marquette University, September 2003-2007

#### **Grants and Contracts:**

#### Awarded

## Extramural

- Weimer, W, Wadsworth, D, **Kluess, H**, Neely, K, Oliver, G, Sefton, J (co-I's). DHSST contract# 7ORSAT22CB0000002. Detection Canine Innovations and Technology . 2022-2027.
- Rodriguez, M, McCann, T, Taylor, M, Stephen, D, Cheng, N, **Kluess, H**. "Mom strEss & chilD heALth (MEDAL) Study: A mixed-methods approach to the associations between maternal experiences and child toxic stress response in Black/African-American families'. VCOM's FY21 Research Eureka Accelerator Program (REAP). Total award: \$55,670 for 2 years, funded August, 2020.
- **Kluess HA** (PI), Wadsworth D, Lee-Fowler, T. "What makes and owner successful in maintaining their dog's healthy body condition?" Association of Professional Dog Trainers. Total budget \$1500. Funded May 2019.
- Plexico, L (PI), Sandage M (PI) and **Kluess, HA** (PI). "Multi-system measurements of hormonal influence on voice production". R03. NIH. Total budget \$300,000 over 3 yrs. My portion \$30,000 over 3 yrs. Funded, July 2014-June 2017.
- **Kluess, HA** (PI) and Wideman R (co-PI). "Vascular mechanisms associated with the development of plexiform lesions in chickens with idiopathic pulmonary arterial hypertension". Arkansas Biosciences Institute. July 2006-June 2007. Total funds \$28,839.

- **Kluess, HA**. (PI). R03. "Age-related changes in the mechanisms of sympathetic neurotransmission in female". National Institute on Aging. September 2008-August 2010. Total funds \$111,747.
- **Kluess, HA**. (PI). Mechanisms of Sympathetic Neurotransmission. Arkansas Biosciences Institute. July 2008-May 2009. Total funds \$59,931.
- **Kluess, HA**, Wadsworth D, Lee-Fowler, T. "Does participation in canine sports improve physical function and health in women over 50 years old?" HABRI Foundation Grant. Total Request: \$56,788 over 2 years, not funded, May 2020.

#### Intramural

**Kluess, HA** (PI). The hormone-like effect of food on immune function and blood glucose control. College of Education Seed Grant. April 2015-2016. Total funds \$5000.

**Kluess, HA** (PI). Do human red blood cells release ATP under exercise-related conditions? College of Education Seed Grant. April 2013-2014. Total funds \$4000.

Jeganathan, R (PI) and **Kluess, HA** (Co-PI). "Role of neurotrophin receptor in Alzheimer's disease". Vice Provost for Research Intramural Grant Program. February 2012-2014. Total Funds: \$82,000.

#### Awards/Certifications:

Certified Canine Fitness Trainer, University of Tennessee, effective date 7/2019

Named as a <u>Western Fellow</u> by the University of Western Ontario. The award included travel, room and board for a 3 week visit to develop scientific collaborations. May 2015.

Fellowship in the American College of Sports Medicine, awarded April 2010.

Outstanding Researcher Award, Department of Health Science, Kinesiology, Recreation and Dance. University of Arkansas, Fayetteville, AR. Spring 2009.

Ralph Powe Junior Faculty Enhancement Award nominee for the University of Arkansas, Fayetteville AR. Spring 2009

PEW Scholars Program in the Biomedical Sciences Nominee for the University of Arkansas, Fayetteville. Fall 2008

New Faculty Commendation for Teaching Commitment. Wally Cordes Teaching and Faculty Support Center. University of Arkansas. September 2008, 2009.

Distinguished Dissertation Award in Science, Engineering, and Technology. Louisiana State University, 2002.

#### **Service:**

**Program reviewer** for the Department of Kinesiology, Sam Houston State University, Spring 2017

# American Physiological Society

Member of the Awards Committee, January 2015-February 2018

## American College of Sports Medicine

Member of the Research Awards Committee, May 2012-May 2018

Editorial Board Member for Medicine and Science in Sport and Exercise, 2014-present

**Associate Editor** for Medicine and Science in Sport and Exercise, 2014-2016

# Southeast Chapter of the America College of Sports Medicine

**Abstract reviewer**. Oct 2022 for SEACSM annual meeting 2023

**Chair**, Tutorial entitled "Autonomic adjustments to physical stress: Insights from microneurographic recordings". Chattanooga, TN, February 2018

Abstract evaluator for SEACSM 2017Annual Meeting, Fall 2016.

**Chair**, Poster session entitled "Body Composition and Biomechanics". Jacksonville, FL, February 2015 **Chair**, SEACSM lecture Tour, 2015

## Manuscript and Grant Reviewer

**Grant Reviewer** for the General Directorate for Health and Technologies Research, Republic of Italy, Ministry of Labour, Health and Social Policies, Department of Innovation, Fall 2009.

Manuscript reviewer for American Journal of Physiology, American Journal of the Medical Sciences, Experimental Physiology, Clinical and Experimental Pharmacology and Physiology, Journal of Applied Physiology, Exercise and Sport Sciences Reviews, and Medicine and Science in Sports and Exercise, Journal of Thermal Biology, Poultry Science, World of Gastroenterology 2003-present.

### Auburn University

University

Reviewer, AAES-AIR Panel Grants, July 2021

**Organized** the Dog research at Auburn University group and organized our first conference called "Dog Research at Auburn University". April 23, 2021

Reviewer, Intramural Grant Program, Spring 2017, 2020

Member, Institutional Review Board (Health Science Emphasis), Fall 2016-August 2022

Chair, Steering Committee for Women in Science and Engineering, Fall 2016-2017.

Organized:

TESS talks Fall 2016, Spring 2017

Panel discussions of work life balance and other career issues Fall 2016, 2017

CV/Dossier reviews for promotion and tenure, Spring 2017

Networking events for new and newly tenured professors, Fall 2016

**Steering Committee Member** representing the College of Education for Women in Science and Engineering (WISE), August 2014-2021

Member, Program Committee for Women in Science and Engineering, Oct 2014-2021

**Curriculum Vitae reviewer**, Women's Initiatives, the Pathways to Full Professor and Beyond Initiative, Summer 2014

**Member**, Selection Panel for the Distinguished Dissertation Awards in Social Sciences, May 2012-May 2015

Faculty Representative for Camp War Eagle, July 2013

#### College

**Chair**, Scholarship and Innovation Committee, College of Education, August 2013-2017 Organized:

Review of Seed grant program twice a year, Fall 2013-Spring 2017

Review of Undergraduate Research Fellowships, Spring 2016, 2017

Developed the rules and managed the SONA system for the COE

Technology information sessions, Spring 2015

Member, College of Education Scholarship and Innovation Committee, August 2012-2017

Founding member of the Women's CORE (Community of Researchers in Education)

Organized:

Panel on "Navigating work allocations early in your faculty career" on Fall, 2016

Seminar on "Improving productivity with Mindfulness", Spring 2016

Panel on "Gaining work life balance", Fall 2015

Seminar on "Writing through blocks and interruptions", Spring 2015

#### Department

Chair, Professional Development Committee 2018-present

Organized seminars:

Kluess, HA. "Navigating the IRB process". October 5, 2018

Prisby, R. "Does the link between age-related cardiovascular and bone disease reside in the bone marrow?". November 16, 2018

Prisby, R. "Oh the places you will go". November 16, 2018

Member, Search Committee for Assistant Professor Position, August 2013-April 2014

Member, Exercise Science Program Area Committee, August 2011-present

### **University of Arkansas**

Member, Research Advisory Council for College of Education and Health Professions, 2010.

Member, All University Conduct Board, 2010-2011.

**Exercise Science Representative**, the Troy Hendricks Scholarship Committee, Department of Health Science, Kinesiology, Recreation and Dance, 2010, 2011.

**Poster presentation judge**, From Abstract to Contract: Graduate Student Research Symposium and Career Networking Event. University of Arkansas. February 2009.

**At-Large Member for the Faculty Panel**, Complaint Procedures for Undergraduate Students. 2007-2011.

# Central States American College of Sports Medicine

**Member**, Site selection committee for the Central States American College of Sports Medicine, 2009 **Arkansas Representative**, the Central States American College of Sports Medicine Executive Committee, 2008-2011.

**Member**, the Nominating Committee for the Central States American College of Sports Medicine, 2008-2011.

## Ozark Chapter of the Association of Women in Science

Secretary and Activity Coordinator, the Ozark AWIS Chapter, 2008-2010

AWIS judge for the 53<sup>rd</sup> annual Chicago Public Schools Student Science Fair, March 2003

## Medical College of Wisconsin

Member, the Postdoctoral Advisory Committee, Medical College of Wisconsin, 2005-2007

Member, the Travel Award Committee, Medical College of Wisconsin, 2005-2007

# Theses:

Kluess HA <u>Vagal Modulation of the heart and central hemodynamics during dynamic handgrip exercise and forearm occlusion following forearm exercise training.</u> Doctoral dissertation, Louisiana State University, Baton Rouge, Louisiana, 2002.

Kluess HA <u>Skeletal Muscle Metabolic Response to an Acute Bout of Exercise in Patients with Occlusive Vascular Disease</u>, Master's Thesis, University of Florida, Gainesville, Florida, 1997.

#### **Publications:**

- 1. Ferguson BS, LE Neidert, MJ Rogatzki, KR Lohse, LB Gladden, **HA Kluess**. (2021). Red blood cell ATP release correlates with red blood cell hemolysis. <u>American Journal of Physiology Cell Physiology</u>, 321 (5):C761-C769.
- 2. **Kluess, HA**, RL Jones, T Lee-Fowler. (2021). Perceptions of body condition, diet and exercise by sports dog owners and pet dog owners. Animals, 11, 1752.

- 3. Patel R, Sandage MJ, **Kluess HA**, Plexico LW. (2021). High-speed characterization of vocal fold vibrations in normally cycling and postmenopausal women: randomized double-blind analyses. Journal of Speech, Language, and Hearing Research, 64: 1869-1888.
- 4. **Kluess, HA**. (2020). Dipeptidyl peptidase IV as a muscle myokine. <u>Frontiers in Physiology</u>, fphys.2020.00148.
- 5. Plexico, LW, MJ Sandage, **HA Kluess**, A Franco-Watkins, LE Neidert. (2020). Blood Plasma Hormone Level Influence on Vocal Function. <u>Journal of Speech, Language, and Hearing Research</u>, 63: 1378-1386.
- 6. **Kluess, HA**, LE Neidert, MJ Sandage, LW Plexico. (2019). Neuropeptide y and dipeptidyl peptidase IV in normally cycling and post-menopausal women: a prospective pilot study. <u>Medicine</u>, 98(13): e14135-15153.
- 7. Roberson PA, MA Romero, PW Mumford, SC Osburn, CT Haun, CG Vann, **HA Kluess**, MD Roberts. (2018). Protein supplementation throughout 10 weeks of progressive run training is not beneficial for time trial improvement. Frontiers in Nutrition, 5: article 97.
- 8. **Kluess HA**, LE Neidert. (2018). Post-exercise glucose response following whey protein ingestion in healthy young people: A randomized pilot study. <u>Open Diabetes Journal</u>, 8: 1-12.
- 9. LaMantia AM, LE Neidert, **HA Kluess**. (2018). Reliability and validity of near-infrared spectroscopy mitochondrial capacity measurement in skeletal muscle. <u>Journal of Functional Morphology and Kinesiology</u>, 3: 19.
- 10. Neidert, LE, M Al-Tarhuni, D Goldman, **HA Kluess**, DN Jackson. (2018). Endogenous dipeptidyl peptidase IV modulates skeletal muscle arteriolar diameter in rats. <u>Physiological Reports</u>, 6(2): e13564.
- 11. Holland AM, WC Kephart, P Mumford, CB Mobley, R Lowery, J Shake, R Patel, J Healy, D McCullough, **HA Kluess**, K Huggins, A Kavazis, J Wilson, MD Roberts. (2016). Effects of a ketogenic diet on adipose tissue, liver and serum biomarkers in sedentary rats and rats that exercised via resisted voluntary wheel running. <u>American Journal of Physiology: Regulatory, integrative, and Comparative Physiology</u>, 311(2): R337-351.
- 12. Neidert, LE, CB Mobley, WC Kephart, MD Roberts, **HA Kluess**. (2016). The serine protease, dipeptidyl peptidase IV as a myokine: dietary protein and exercise-mimetics as a stimulus for transcription and release. <a href="Physiological Reports">Physiological Reports</a>, 4(12): e12827.
- 13. Neidert, LE, RB Jeganathan, **HA Kluess**. (2016). Dipeptidyl peptidase-IV activity and neuropeptide Y in the mouth: The relationship with body composition and the impact of sucrose and aspartame. Journal of Nutritional Biology, 1(1): 61-72.
- 14. Neidert, LE, KS Wainright, C Zheng, RB Jeganathan, **HA Kluess**. (2016). Plasma Dipeptidyl Peptidase IV activity and measures of body composition in apparently healthy people. <u>Heliyon</u>, 2: article number e00097.

- 15. Stone, AJ, KW Evanson, **HA Kluess**. (2014). ATP metabolism in skeletal muscle arterioles. Physiological Reports, 2(1): 1-8.
- 16. Evanson, KW, AJ Stone, E Samraj, T Benson, R. Prisby **HA Kluess**. (2012). The influence of estradiol supplementation on neuropeptide neurotransmission in skeletal muscle arterioles of F344 rats. <u>American Journal of Physiology: Regulatory, Integrative and Comparative Physiology</u>, 303: R651-657.
- 17. Geetha, T, C Zheng, B Unroe, M Sycheva, **HA Kluess** RB Jeganathan. (2012). Polyubiquitination of the neurotrophin receptor p75 directs neuronal cell survival. <u>Biochemical and Biophysical Research Communications</u>, 421: 286-290.
- 18. **Kluess, HA**, J.Stafford, KW Evanson, AJ Stone, J Worley, RF Wideman. (2012). Lung resistance arterioles respond to serotonin and ATP in broiler chickens susceptible to idiopathic pulmonary arterial hypertension. Poultry Science, 91: 1432-1440.
- 19. DeLorey, DS, PS Clifford, S Mittelstadt, MM Anton, **HA Kluess**, J Tune, U Dincer, JB Buckwalter. (2012). The effect of aging on adrenergic and non-adrenergic receptor expression and responsiveness in canine skeletal muscle. Journal of Applied Physiology, 112: 841-848.
- 20. Evanson, KW, AJ Stone, AL Hammond, **HA Kluess**. (2011). Neuropeptide Y overflow and metabolism in skeletal muscle arterioles. Journal of Physiology, 589: 3309-3318.
- 21. DeLorey, DS, JB Buckwalter, S Mittelstadt, MM Anton, **HA Kluess**, JD Tune, PS Clifford. (2010). Is tonic sympathetic vasoconstriction increased in the skeletal muscle vasculature of aged canines? <u>American Journal of Physiology: Regulatory, Integrative and Comparative Physiology</u>, 299: 1342-1349.
- 22. **Kluess, HA**, AJ Stone, KW Evanson. (2010). ATP overflow in skeletal muscle 1A arterioles. <u>Journal of Physiology</u>, 588: 3089-3100.
- 23. DeLorey DS, JJ Hamann, **HA Kluess**, PS Clifford, JB Buckwalter. (2007). Alpha-adrenergic receptor responsiveness is preserved during prolonged exercise. <u>American Journal of Physiology</u>: Heart and <u>Circulatory Physiology</u>, 292: H392-H398.
- 24. **Kluess HA**, JB Buckwalter, JJ Hamann, DS DeLorey, PS Clifford. (2006). Frequency and pattern dependence of adrenergic and purinergic vasoconstriction in skeletal muscle arteries. Experimental Physiology, 91: 1051-1058.
- 25. DeLorey DS, JJ Hamann, **HA Kluess**, PS Clifford, JB Buckwalter. (2006). Alpha-adrenergic receptor mediated restraint of skeletal muscle blood flow during prolonged exercise. <u>Journal of Applied Physiology</u>, 100: 1563-1568.
- 26. Clifford PS, **HA Kluess**, JJ Hamann, JB Buckwalter, JL Jasperse. (2006). Mechanical compression elicits vasodilation in skeletal muscle vasculature. Journal of Physiology (Lond), 572: 561-567.
- 27. **Kluess HA**, JB Buckwalter, JJ Hamann, PS Clifford. (2005). Elevated temperature decreases sensitivity of P2X purinergic receptors in skeletal muscle arteries. <u>Journal of Applied Physiology</u>, 99: 995-998.

- 28. **Kluess HA**, JB Buckwalter, JJ Hamann, and PS Clifford. (2005). Acidosis attenuates P2X purinergic vasoconstriction in skeletal muscle arteries. <u>American Journal of Physiology</u>: Heart and Circulatory <u>Physiology</u>, 288: H129-H132.
- 29. **Kluess HA** and RH Wood. (2005). Heart Rate Variability and the Exercise Pressor Reflex during Dynamic Handgrip Exercise and Post-Exercise Arterial Occlusion. <u>American Journal of the Medical Sciences</u>, 329: 117-123.
- 30. Hamann JJ, **HA Kluess**, JB Buckwalter, PS Clifford. (2005). Blood flow response to muscle contractions is more closely related to metabolic rate than contractile work. <u>Journal of Applied Physiology</u>, 98: 2096-2100.
- 31. Buckwalter JB, JJ Hamann, **HA Kluess**, PS Clifford. (2004). Vasoconstriction in exercising skeletal muscles: a potential role for neuropeptide Y. <u>American Journal of Physiology Heart and Circulatory Physiology</u> 287: H144-H149.
- 32. Eason JM, **HA Kluess**, AG Nelson. (2003). Cardiac myosin phenotype remodeling following adrenodemedullectomy and chronic 6-OHDA in male Sprague-Dawley rats. <u>Experimental and Clinical Cardiology</u> 8: 139-142.
- 33. Wood RH, S Leleaux, MA Welsch, AG Nelson, **HA Kluess**, A Lee. (2001). Heart rate variability following five weeks of detraining in competitive swimmers. <u>Medicina Sportiva</u>, 5(1, english edition): E49-E58.
- 34. **Kluess HA**, AG Nelson, M Duke. (2001). Cardiac myosin phenotype remodeling following chronic spinal transection. Molecular and Cellular Biochemistry, 216: 31-35.
- 35. **Kluess HA**, RH Wood, MA Welsch. (2000). Vagal modulation of the heart and central hemodynamics during handgrip exercise. <u>American Journal of Physiology</u>, 279: H1648-H1652.
- 36. Back M, **HA Kluess**, T Huber, C Stopka, K Scott, J Ballinger, MA Welsch, A Brunner, T Lyles, T Harward, J Seeger. (2000). Evaluation of skeletal muscle metabolic responses following exercise training in patients with intermittent claudication. <u>Vascular Surgery</u>, 34: 345-359.
- 37. Braith R, MA Welsch, M Feigenbaum, **HA Kluess**, C Pepine. (1999). Neuroendocrine activation in heart failure is modified by endurance exercise training. <u>Journal of the American College of Cardiology</u>, 34(4): 1170-1175.
- 38. **Kluess HA**, RH Wood, N Aucoin, E Hirschey, A LaBruzzo, CM Lee, K Metoyer, R Reyes, A Sebastien. (1998). Physical function, perceived quality of life, and presence of disease in Louisiana senior citizens. <u>LAHPERD Journal</u>, 62(1): 5-8.

## **Undergraduate Research Mentoring:**

#### Awards

Caroline Hubbard won 1<sup>st</sup> place in the Southeast Chapter of the American College of Sports Medicine undergraduate research competition for her abstract entitled "The effects of macronutrients in inducing satiety via peptide YY". SEACSM Annual Conference, Greenville, SC, 2016

#### Grants

- Mann, Elise and **Kluess, HA** (PI). Undergraduate Research Fellowship, Auburn University. Total funds \$3000, 2017-2018.
- Mann, Elise and **Kluess, HA** (PI). Undergraduate Research Fellowship, Auburn University. Total funds \$3000, 2015-2016.
- Hubbard, CE and **Kluess**, **HA** (PI). Undergraduate Research Fellowship, Auburn University. Total funds \$1700, Summer 2015.
- **Kluess, Heidi A**. (PI) & Allyson Hammond (Co-PI). SURF grant University of Arkansas. "Effects of Aging and Gender on NPY Release and DPP IV Activity in Arteries and Arterioles". January-May 2010. Total funds \$2650.
- **Kluess, Heidi A.** (PI) & Heather Bodiford (Co-PI). Honor's College Grant University of Arkansas. "Effect of neurotransmitters on coronary arterial blood flow". January-May 2010. Total funds \$2650.
- **Kluess, Heidi A**. (PI) & Amanda Reed (Co-PI). Honor's College Grant University of Arkansas. "ATPase activity under heat". January-May 2009. Total funds \$2,650.

### **Publications**

Student author: Mann, Elise; Co-Authors: **HA Kluess**, LE Neidert, CE Hubbard. The Influence of Carbohydrate Beverages on Salivary Neuropeptide Y and DPP-IV Activity. Published as a Research Highlight in AUJUS, Auburn University, Volume 5, Spring 2016.

Student author: Caroline Hubbard; Co-authors: **HA Kluess**, LE Neidert, EK Mann. The Effects of Macronutrients on Inducing Satiety via Peptide YY. Published as a Research Highlight in AUJUS, Auburn University, Volume 6, Spring 2017.

# Abstracts presented by undergraduate students

- 1. Mann, E, HA Kluess, LE Neidert, AM LaMantia, M Sandage, L Plexico. Neuropeptide Y and dipeptidyl peptidase IV in pre- and post-menopausal women. (2017). <u>The FASEB Journal</u>, 32(1): supp 882.4.
- 2. Mann, E., LE Neidert, ZB Rightmire, AM LaMantia, HA Kluess. (2017). The influence of DPP-IV and CD26+ T-cells on IL-6 following a DOMS protocol in college-aged participants. Presented at the Annual Meeting for the Southeast Chapter of the American College of Sports Medicine, Greenville, SC.
- 3. Hubbard, CE, LE Neidert, **HA Kluess**. (2016). The effects of macronutrients in inducing satiety via peptide YY. Presented at the Annual meeting for the Southeast Chapter of the American College of Sports Medicine, Greenville, SC.
- 4. Mann, E, CE Hubbard, LE Neidert, **HA Kluess**. (2016). The influence of carbohydrate beverages on salivary DPP-IV activity. Presented at the Annual meeting for the Southeast Chapter of the American College of Sports Medicine, Greenville, SC.
- 5. Hubbard, CE, LE Neidert, **HA Kluess**. (2015). The influence of age and body composition on salivary neuropeptide Y and DPP-IV activity. Presented at the Annual meeting for the Southeast Chapter of the American College of Sports Medicine, Jacksonville, FL.
- 6. Bodiford, HD, AJ Stone, KW Evanson, L Devareddy, **HA Kluess**. (2010). Dipeptidyl peptidase IV activity in ovarectomized rats following interventions to improve bone density. <u>Medicine and Science in Exercise and Sport</u>, 42: 2825.
- 7. Hammond, AL, AJ Stone, KW Evanson, L Devareddy, **HA Kluess**. (2010). The effects of dietary supplements on ATPase activity in ovariectomized rats. <u>Medicine and Science in Exercise and Sport</u>, 2830.
- 8. Counce, MC, AJ Stone, KW Evanson, HA Kluess. (2009). ATPase activity in rat tail artery.

- Presented at Central States Chapter of the American College of Sports Medicine Annual Conference, Columbia, MO.
- 9. Dimond, AM, KW Evanson, AJ Stone, **HA Kluess**. (2008). Heat and vasodilation in female rats. Presented at Central States Chapter of the American College of Sports Medicine Annual Conference, Kansas City, MO.

#### **Conferences:**

### Symposia:

- "ATP and blood flow: a new role for the energy transfer molecule?" HA Kluess, KE Evanson, LE Neidert, LB Gladden for the Southeast Chapter of the American College of Sports Medicine, Greenville, SC, February 2016.
- "Food as a Hormone". HA Kluess, M Roberts, LE Neidert, CB Mobley. Presented at the annual meeting for the Southeast Chapter of the American College of Sports Medicine, Jacksonville, FL, February 2015.
- "Multifactorial role for ATP in skeletal muscle blood flow during exercise". **HA Kluess**, PS Clifford, MP Kaufmann, BS Kirby and DN Jackson. Presented at the National American College of Sports Medicine Meeting, Orlando, FL, May 2014.
- "Sympathetic regulation of blood flow: It's not just norepinephrine anymore". **HA Kluess**, PS Clifford, DN Jackson. Presented at the National American College of Sports Medicine Meeting, Indianapolis, IN, May 2013.
- "Control of Blood Flow during Muscle Contractions". **HA Kluess**, LB Gladden, BS Ferguson, MJ Rogatzki. Presented at the annual meeting for the Southeast Chapter of the American College of Sports Medicine, Greenville, SC, February 2013.
- "Age-related changes in the skeletal muscle vasculature: Sympathetic neurotransmission in skeletal muscle arterioles" as part of a symposium entitled "Aging Physiology and Exercise" at the Annual meeting of the Central States ACSM chapter, October 21, 2010.
- "Environmental modification of sympathetic receptor sensitivity" as part of a symposium entitled "Sympathetic vasoconstriction: Beyond alpha-adrenergic receptors" American College of Sports Medicine Annual Meeting, June 2006.
- "Environmental modulation of sympathetic receptor sensitivity" for Central States American College of Sports Medicine Annual Conference, Kansas City, MO, October 2008.

### **Published Abstracts presented as posters:**

- 1. Jones, RL, **HA Kluess**, T Lee-Fowler. (2021). Are dogs that participate in dog sports in better shape?. Association of Professional Dog Trainers Annual Conference, online.
- 2. Clarke, HE, **HA Kluess**, S Adams, D-H Kim, R Hickner. (2020). Metabolomics profiling in response to a cold pressor test. <u>The FASEB Journal</u>,.
- 3. LaMantia, AM, LE Neidert, **HA Kluess**. (2018). Reliability and validity of NIRS mitochondrial capacity protocol in human skeletal muscle. <u>The FASEB Journal</u>, 32(1): supp 589.3.
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#### Abstracts presented as poster, not published:

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