

Curriculum Vitae

KAREN L. SWEAZEA, PhD, FAHA

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Current as of November 21, 2024

EDUCATION

2005-2008	Postdoc	Univ. of New Mexico, Albuquerque Dr. Benjimen Walker, mentor	Vascular Physiology
2000-2005	Ph.D.	Univ. of Arizona, Tucson Dr. Eldon Braun, mentor	Physiological Sciences
1995-1998	B.S.	Univ. of Arizona, Tucson	Physiology
1993-1995	A.A.	El Camino College, Torrance, CA	General Studies

PROFESSIONAL POSITIONS

2020-pres	Associate Faculty, Biodesign Center for Health through Microbiomes, ASU
2018-pres	Affiliated Faculty, Center for Evolution and Medicine, School of Life Sciences (SOLS), ASU
2018-pres	Investigator, Adapting to City Life Theme, Central Arizona-Phoenix Long Term Ecological Research (CAP LTER) program, ASU
2015-pres	Associate Professor and Barrett Honors Faculty, Nutrition Program, CHS, ASU
2020-2023	Program Co-Director, Exercise and Nutritional Sciences PhD Program, CHS, ASU
2020-2023	Research Principal Investigator, WOC (without compensation) appointment, Veterans Administration, Phoenix, AZ
2017-2022	Designated Campus Colleague, College of Medicine, University of Arizona, Phoenix campus, collaborating with Dr. Rayna Gonzales
2015-2017	Adjunct Associate Professor, Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN
2011-2015	Assistant Professor and Barrett Honors Faculty, Nutrition Program, School of Nutrition and Health Promotion, College of Health Solutions, ASU, Phoenix, AZ*
2010-2011	Assistant Professor and Barrett Honors Faculty, Nutrition Program, College of Nursing and Health Innovation, ASU, Phoenix, AZ*
2009-2010	Assistant Professor, Health Sciences Program, College of Nursing and Health Innovation, ASU, Phoenix, AZ*
2008-2009	Assistant Professor, Applied Biological Sciences, ASU, Mesa, AZ*
2008	Assistant Professor, Physics, Chemistry, and Applied Mathematics, ASU, Mesa, AZ*
2005-2008	Postdoctoral Fellow, University of New Mexico, Albuquerque, NM
2001-2005	Exam Supervisor for national and university exams, University of Arizona Testing Office, Tucson, AZ
2000-2005	Graduate Research Assistant, University of Arizona, Tucson, AZ

**All changes in program affiliation were related to university-wide administrative reorganizations*

GRADUATE FACULTY MEMBERSHIPS

- 2014-pres Elected to the graduate faculty of Biological Design, The Biodesign Institute, ASU, Tempe, AZ
- 2011-pres Elected to the graduate faculty of Evolutionary Biology, School of Life Sciences, ASU, Tempe, AZ
- 2011-2020 Appointed to Organismal, Integrative and Systems Biology faculty group, School of Life Sciences, ASU, Tempe, AZ
- 2010-pres Elected to the graduate faculty of Biology, School of Life Sciences, ASU, Tempe, AZ

AWARDS/RECOGNITIONS

- 2023 Professor of Impact Award, ASU
- 2022 ASU Sun Award
- 2022 Mentoring Award, College of Health Solutions, ASU
- 2022 Distinguished Service as Awards Chair for the Comparative and Evolutionary Physiology Section of the American Physiological Society
- 2021 ASU Sun Award
- 2020 Experimental Biology and Medicine (EBM) Outstanding Reviewer Award, Society for Experimental Biology and Medicine
- 2019 Elected Fellow of the American Heart Association (FAHA), Council on Basic Cardiovascular Sciences
- 2018 Nominated, 2019 Graduate College Outstanding Faculty Mentor Award, ASU
- 2018 Nominated, Zebulon Pearce Distinguished Teaching Award, College of Liberal Arts and Sciences, ASU
- 2017 T/TT Excellence in Service Award, School of Nutrition and Health Promotion, CHS, ASU
- 2016 Distinguished Service as Treasurer for the Comparative and Evolutionary Physiology (CEP) Section of the American Physiological Society
- 2015 New Investigator Award, CEP section of the American Physiological Society
- 2014 Outstanding Faculty Mentor Award, Faculty Women's Association, ASU
- 2014 Dale J. Benos Early Career Professional Service Award, The American Physiological Society (<http://bit.ly/OqEWRw>)
- 2013-pres Member, Sarver Heart Center, The University of Arizona, Tucson, AZ
- 2013 Nominated, Alfred P. Sloan Research Fellowship
- 2011 Nominated, Outstanding Faculty Mentor Award, Faculty Women's Association, ASU
- 2010 Elected Member, Sigma Xi, The Scientific Research and Honor Society
- 2008 August Krogh Young Investigator Award, The Microcirculatory Society
- 2006 Research Recognition Award, CEP section of the American Physiological Society
- 2004 Women in Science and Engineering (WISE) Travel Grant

PROFESSIONAL AND ACADEMIC MEMBERSHIPS

- 2022-pres The New York Academy of Sciences (NYAS)
- 2018-pres National Center for Faculty Development and Diversity (NCFDD)
- 2014-pres University Club, Arizona State University
- 2013-2018 American Society for Nutrition (ASN)

2010-pres Elected Member, Sigma Xi, The Scientific Research and Honor Society
 2009-pres Faculty Women's Association, Arizona State University
 2009-pres The Arizona Physiological Society (AzPS)
 2005-2010 American Association for the Advancement of Science (AAAS)
 2004-pres Silver Heart Member, American Heart Association (AHA)
 2002-pres Elected Member, The American Physiological Society (APS)

STUDY SECTIONS/GRANT REVIEWS

American Heart Association (AHA)

2024 Established Investigator Awards (Fall)
 2018-2024 Vascular Biology & Blood Pressure BSc Fellowship Program (Spring and Fall submission cycles)
 Spring 2017 Vascular Biology & Blood Pressure BSc 2 Study Section

National Science Foundation (NSF)

Dec 2020 Peer Reviewer, Physiological Mechanisms and Biomechanics Program, Division of Integrative Organismal Systems – HBCU EiR Proposal

PUBLICATIONS

- Underlined names are mentored students (†Undergraduate student; ††Graduate Student; †††Postdoctoral Fellow)
- *Senior or Corresponding Author

A. Peer-reviewed

72. Basile A††*, Noshirwani N†, Sweazea KL*. (*Accepted with Minor Revisions*) Eighty-five percent of menu items from the six highest-selling fast-food restaurants in the United States are ultra-processed. *Public Health Nutrition*.
71. Basile AJ††*, Ruiz-Tejada A††, Stanley S††, Mohr AE††, Hjelm E†, Sweazea KL*. (Online ahead of print) Minimally processed foods have a higher total antioxidant content compared to processed and ultra-processed foods: Results from an analysis of 1,946 food items. *British Journal of Nutrition*.
70. Basile AJ††*, Ruiz-Tejada A††, Mohr AE††, Morales AC†, Hjelm E†, Brand-Miller JC, Atkinson FS, Sweazea KL*. (Online ahead of print) Food processing according to the NOVA Classification is not associated with glycemic index and glycemic load: Results from an analysis of 1,995 food items. *American Journal of Clinical Nutrition*.
69. Mohr AE††, Sweazea KL#, Bowes DA, Jasbi P, Whisner CM, Sears D, Krajmalnik-Brown R, Gu H, Klein-Seetharaman J, Arciero KM, Gumprich E#, Arciero PJ#*. (2024) Gut microbiome remodeling and metabolomic profile in response to intermittent fasting with protein pacing versus continuous caloric restriction. *Nature Communications*. 15(1): 4155.
68. Basile AJ††, Kreisler A†, Hassen R†, Singh K†, Symes M†, Larson G†, Figueiredo de Sousa M††, Sweazea KL*. (2024) Acute metformin induces hyperglycemia in healthy adult mourning doves, *Zenaida macroura*. *Comparative Biochemistry and Physiology A*. 291: 111594. DOI: 10.1016/j.cbpa.2024.111594

2023

67. Arciero P*, Poe M, Mohr AE††, Ives SJ, Arciero A, **Sweazea K**, Gumprich E, Arciero KM. (2023) Intermittent fasting and protein pacing are superior to calorie restriction for weight and visceral fat loss. *Obesity*. 31:139-149, 2023.
66. Deviche P*, **Sweazea KL***, Angelier F*. (2023) Past and future: Urbanization and the avian endocrine system. *General and Comparative Endocrinology*. 332: 114159, 2023.

2022

65. Mohr AE††*, Jasbi P††, Bowes DA, Dirks B, Whisner CM, Arcaro KM, Poe M, Gu H, Gumprich E, **Sweazea KL**, Arciero P*. (2022) Exploratory analysis of one versus two-day intermittent fasting protocols on the gut microbiome and plasma metabolome in adults with overweight/obesity. *Frontiers in Nutrition*. 9: 1036080.
64. Brown J†††*, Basile A††, Bateman H, Lerman S, Warren P, Deviche P, **Sweazea KL***. (2022) No fry zones: How restaurant distribution and abundance influence avian communities. *PLOS ONE*. 17(10): e0269334.
63. Mohr AE††*, Basile A††, **Sweazea KL***. (2022) An urban diet differentially alters the gut microbiome and metabolomic profiles compared to a seed diet in mourning doves. *American Journal of Physiology – Regulatory, Integrative, and Comparative Physiology*. 323(4):R385-R396.
62. Basile A††, Singh K†, Watson D††, **Sweazea KL***. (2022) *Comparative Models in Biomedical Research* special issue: Effect of macronutrient and micronutrient manipulation on avian blood glucose concentration: A systematic review. *Comparative Biochemistry and Physiology A*. 272: 111279.
61. **Sweazea KL***. (2022) Invited review for the *Comparative Models in Biomedical Research* special issue: Revisiting glucose regulation in birds – A negative model of diabetes complications. *Comparative Biochemistry and Physiology B*. 262: 110778.
60. Jain R†, Bolch C, Al-Nakkash L, **Sweazea KL***. (2022) Systematic review of the impact of genistein on diabetes related outcomes. *American Journal of Physiology – Regulatory, Integrative and Comparative Physiology*. 323(3):R279-R288.
59. Mohr AE††, Crawford M†††, Jasbi P††, Fessler S††, **Sweazea KL***. (2022) Lipopolysaccharide and the gut microbiota: Considering serotype. *FEBS Letters*. 596(7): 849-875.

2021

58. Mohr AE††, McEvoy C†, Sears DD, Arciero PJ, **Sweazea KL***. (2021) Impact of intermittent fasting regimens on circulating markers of oxidative stress in overweight and obese humans: A systematic review of randomized controlled trials. *Advances in Redox Research*. 3: 100026.
57. Mahnam K*, Shakhshi-Niaei M, Ziaei M, **Sweazea K**. (2021) In silico evaluation of the downstream effect of mutated glucagon is consistent with higher blood glucose homeostasis in Galliformes and Strigiformes. *General and Comparative Endocrinology*. 314(1): 113925.
56. Mohr AE††, Reiss RA, Beaudet M†, Sena J, Naik JS, Walker BR, **Sweazea KL***. (2021) Short-term high fat diet alters genes associated with metabolic and vascular dysfunction during adolescence in rats: A pilot study. *PeerJ*. 9:e11714.

55. Basile A††, Renner M†, Kayata L†, Deviche P, **Sweazea KL***. (2021) A four-week urban diet impairs vasodilation but not nutritional physiology in wild-caught mourning doves (*Zenaida macroura*). *Physiological Biochemical Zoology*. 94(4): 241-252.
54. Basile A††, Kirkton S, Hedrick M, Carey H, **Sweazea KL***. (2021) Defining comparative physiology: Results from a cross-sectional survey of physiologists and systematic review. *American Journal of Physiology – Regulatory, Integrative and Comparative Physiology*. 320(6): R938-944.
53. Mohr AE††, Gumprich E, Sears DD, **Sweazea KL***. (2021) Recent advances and health implications of dietary fasting regimes on the gut microbiome. *American Journal of Physiology – Gastrointestinal and Liver Physiology*. 320(5): G847-G863.
52. Basile AJ††, Renner MW†, Hidaka BH, **Sweazea KL***. (2021) An evolutionary mismatch narrative to improve lifestyle medicine: A patient education hypothesis. *Evolution, Medicine, & Public Health*. 9(1): 157-163.
51. Basile A††, Mohr AE††, Jasbi P††, Gu H, Deviche P, **Sweazea KL***. (2021) A four-week high fat diet does not alter plasma glucose or metabolic physiology in wild-caught mourning doves (*Zenaida macroura*). *Comparative Biochemistry and Physiology Part A*. 251: 110820.

2020

50. Crawford M††, Mohr AE††, **Sweazea KL***. (2020) Novel organic mineral complex prevents high-fat diet-induced changes in the gut and liver of male Sprague-Dawley rats. *Journal of Nutrition and Metabolism*. 2020: Article ID: 8846401.
49. Anthony C††, Wilson A††, **Sweazea KL***, Braun EJ. (2020) Fewer exposed lysine residues may explain relative resistance of chicken serum albumin to *in vitro* protein glycation in comparison to bovine serum albumin. *Journal of Molecular Evolution*. 88(8): 653-661, 2020.
48. Basile AJ††, Jasbi P††, Clark W†, Shi X††, Gu H, Deviche P, **Sweazea KL***. (2020) A four-week white bread diet does not alter plasma glucose concentrations, metabolic or vascular physiology in mourning doves, *Zenaida macroura*. *Comparative Biochemistry and Physiology, Part A*. 247:110718
47. Funk A†, Hutton P††, Earl S, Deviche P, **Sweazea KL***. (2020) Levels of land use and land cover in Phoenix, Arizona are associated with elevated plasma triglycerides in the Gambel's quail, *Callipepla gambelii*. *Comparative Biochemistry and Physiology, Part A*. 247:110730.
46. **Sweazea KL***, Tsosie K††, Beckman EJ, Benham PM, Witt CC. (2020) Seasonal and elevational variation in glucose and glycogen in two songbird species. *Comparative Biochemistry and Physiology, Part A*. 245:110703.
45. Mohr AE††, Mayra ST††, Gnant L, Basile AJ††. **Sweazea KL#**. (2020) Nutrition and dietetic students' knowledge and attitudes regarding food science and technology. *Journal of Food Science Education*. 2020: 1-13.
44. Mohr AE††, Basile AJ††, Crawford MS††, **Sweazea KL**, Carpenter KC*. (2020) Probiotic supplementation has a limited effect on circulating immune and inflammatory markers in healthy adults: A systematic review of randomized controlled trials. *Journal of the Academy of Nutrition and Dietetics*. 120(4): 548-564.

2019

43. Gadau A†, Crawford M††, Mayek R†, Giraudeau M†††, McGraw KJ, Whisner CM, Kondrat-Smith C, **Sweazea KL***. (2019) A comparison of the nutritional physiology and gut

- microbiome of urban and rural house sparrows (*Passer domesticus*). *Comparative Biochemistry and Physiology – B*. 237: 110332. PMID: 31461685
42. Crawford MS††, Gumprich E, Sweazea KL*. (2019) A novel organic mineral complex prevented high fat diet-induced hyperglycemia, endotoxemia, liver injury and endothelial dysfunction in young male Sprague-Dawley rats. *PLOS ONE*. 14(8): e0221392.
 41. Mayra S††, Johnston CS*, Sweazea KL. (2019) High-nitrate salad increased plasma nitrates/nitrites and brachial artery flow-mediated dilation in postmenopausal women: a pilot study. *Nutrition Research*. 65: 99-104. PMID: 30954341
 40. Crawford M††, Whisner C, Al-Nakkash L, Sweazea KL*. (2019) Six-week high fat diet alters the gut microbiome and promotes cecal inflammation, endotoxin production and simple steatosis without obesity in male rats. *Lipids*. 54: 119-131. PMID: 30860608
 39. Mohr AE††, Girard M††, Rowe M††, McGraw KJ, Sweazea KL*. (2019) Varied effects of dietary carotenoid supplementation on oxidized lipoproteins in tissues of two waterfowl species. *Comparative Biochemistry and Physiology – B*. 231: 67-74. PMID: 30794961

2018

38. Sweazea KL*, Johnston CJ, Miller B, Gumprich E. (2018) Nitrate-rich fruit and vegetable supplement reduces blood pressure in normotensive healthy young males without significantly altering flow-mediated vasodilation: A randomized, double-blinded, placebo-controlled trial. *Journal of Nutrition and Metabolism*. 2018: Article ID 1729653. PMID: 30305961
37. Aslam F††, Iqbal S*, Nasir M, Anjum AA, Swan PD, Sweazea K. (2018) Effect of hydrogenated fat replacement with white sesame seed oil on physical, chemical and nutritional properties of cookies. *Italian Journal of Food Sciences*. 30: 13-25.

2017

36. Johnston CS*, Sweazea KL, Schwab E††, McElaney EA††. (2017) Almond ingestion contributes to improved cardiovascular health in sedentary older adults participating in a walking intervention: A pilot study. *Journal of Functional Foods*. 39:58-62.
35. Ingram T††, Zuck J††, Borges C, Redig P, Sweazea KL*. (2017) Variations in native protein glycation and plasma antioxidants in several birds of prey. *Comparative Biochemistry and Physiology B*. 210: 18-28. PMID: 28529085.
34. Sweazea KL*, Braun EJ, Sparr R†. (2017) Novel role of insulin in the regulation of glucose excretion by mourning doves (*Zenaid macroura*). *Zoology*. 122: 58-62. PMID: 28363806.
33. Aslam F††, Iqbal S*, Nasir M, Anjum AA, Swan PD, Sweazea K. (2017) Evaluation of white sesame seed oil on glucose control, and biomarkers of hepatic, cardiac, and renal functions in male Sprague-Dawley rats with chemically induced diabetes. *Journal of Medicinal Food*. 20(5): 448-457. PMID: 28332903.
32. Ricklefs-Johnson K††, Johnston CS, Sweazea KL*. (2017) Ground flaxseed increased nitric oxide levels in adults with type 2 diabetes: A randomized comparative effectiveness study of supplemental flaxseed and psyllium fiber. *Obesity Medicine*. 5: 16-24, 2017.
31. Zuck J††, Borges C, Braun EJ, Sweazea KL*. (2017) Chicken albumin exhibits natural resistance to glycation. *Comparative Biochemistry and Physiology-B*. 203: 108-114. PMID: 27773732.
30. Sweazea K*, Johnston C, Knurick J††, Bliss C††. (2017) Plant-based nutraceutical increases plasma catalase activity in healthy participants: A small double-blind, randomized, placebo-

controlled, proof of concept trial. *Journal of Dietary Supplements*. 14(2): 200-213. PMID: 27715348.

2016

29. **Jarrett C††**, **Ahmed Z†**, Faust JJ††, **Sweazea KL***. (2016) High glucose impairs acetylcholine-mediated vasodilation in isolated arteries from mourning doves (*Z. macroura*). *Comparative Biochemistry and Physiology*. 201A: 141-145. PMID: 27445008.
28. Sawyer BJ, Tucker WJ, Bhammar DM, JR Ryder, **Sweazea KL**, Gaesser GA*. (2016) Effects of high-intensity interval training and moderate-intensity continuous training on endothelial function and cardiometabolic risk markers in obese adults. *Journal of Applied Physiology*. 121: 279-288. PMID: 27255523.
27. **Simperova A†**, Al-Nakkash L, Faust JJ, **Sweazea KL***. (2016) Genistein supplementation prevents weight gain but promotes oxidative stress and inflammation in the vasculature of female obese ob/ob mice. *Nutrition Research*. 36(8): 789-797. PMID: 27440533.

2015

26. **Sweazea KL***. (2015) Serving Our Society. *The Physiologist*. 58(4): 181-182. PMID: 26434155.
25. **Sweazea KL***, **Simperova A†**, **Juan T†**, **Gadau A†**, Brant S, Deviche P, **Jarrett C††**. (2015) Pathophysiological responses to a schistosome infection in a wild population of mourning doves (*Zenaida macroura*). *Zoology*. 118(6): 386-393. PMID: 26265584.
24. **Crinigan C††**, **Calhoun M†**, **Sweazea KL***. (2015) Short-term high fat intake does not significantly alter markers of renal function of inflammation in young male Sprague-Dawley rats. *Journal of Nutrition and Metabolism*. 2015: Article ID 157520. PMID: 26185688.

2014

23. **Sweazea KL***, Johnston CS, **Ricklefs KD††**, **Petersen KN††**. (2014) Almond supplementation in the absence of dietary advice significantly reduces C-reactive protein in subjects with type 2 diabetes. *Journal of Functional Foods*. 10: 252-259.
22. **Sweazea KL***, McMurtry JP, Elsey RM, Redig P, Braun EJ. (2014) Comparison of metabolic substrates in alligators and several birds of prey. *Zoology*. 117(4): 253-260. PMID: 25043840.

2013

21. Wilkening JL††*, Ray C, **Sweazea KL**. (2013) Stress hormone concentration in Rocky Mountain populations of the American pika (*Ochotona princeps*). *Conservation Physiology*. 1(1): cot027. PMID: 27293611.
20. Giraudeau M†††*, **Sweazea K**, Butler M, McGraw KJ. (2013) Effects of carotenoid and vitamin E supplementation on oxidative stress and plumage coloration in house finches (*Haemorhous mexicanus*). *Comparative Biochemistry and Physiology*. 166A(3): 406-413. PMID: 23872319.
19. **Jarrett C††**, **Lekic M†**, **Smith CL†**, **Pusec C†**, **Sweazea KL***. (2013) Mechanisms of acetylcholine-mediated vasodilation in systemic arteries from mourning doves (*Zenaida macroura*). *Journal of Comparative Physiology – B*. 183(7): 959-967. PMID: 23640140.
18. **Sweazea KL***, Braun EJ. (2013) Reciprocal inhibition of *in vitro* substrate movement into avian skeletal muscle. *Zoology (Jena)*. 116(2): 85-89. PMID: 23384946.

17. Davies S††*, Rodriguez N†, **Sweazea KL**, Deviche P. (2013) The effect of acute stress and long-term corticosteroid administration on plasma metabolites in an urban and desert songbird. *Physiological and Biochemical Zoology*. 86(1): 47-60. PMID: 23303320.

2012

16. Fokidis HB*, des Roziers MB, Sparr R†, Rogowski C, **Sweazea KL**, Deviche P. (2012) Unpredictable food availability induces metabolic and hormonal changes independent of food intake in a sedentary songbird. *Journal of Experimental Biology*. 215: 2920-2930. PMID: 22837467.
15. Kuzmiak S††, Glancy B†††, **Sweazea KL**, Willis WT*. (2012) Mitochondrial function in sparrow pectoralis muscle. *Journal of Experimental Biology*. 215: 2039-2050. PMID: 22623192.
14. **Sweazea KL*** and Walker BR. (2012) Impaired myogenic tone in mesenteric arteries from overweight rats. *Nutrition and Metabolism*. 9(1): 18-26. PMID: 22424473.

2011

13. Fokidis HB††*, Hurley L††, Rogowski C, **Sweazea K**, Deviche P. (2011) Effects of captivity and body condition on plasma corticosterone, locomotor behavior, and plasma metabolites in curve-billed thrashers. *Physiological and Biochemical Zoology*. 84(6): 595-606. PMID: 22030852.
12. Smith CL†, Toomey M††, Walker BR, Braun EJ, Wolf BO, McGraw K, **Sweazea KL***. (2011) Naturally high plasma glucose levels in mourning doves (*Zenaida macroura*) do not lead to high levels of reactive oxygen species in the vasculature. *Zoology*. 114: 171-176. PMID: 21600747.
11. Matyas ML*, Lowy ME, **Sweazea KL**, Alvarez DF. (2011) Monitoring physiology trainee needs to focus professional society responses: The APS Trainee Needs Surveys. *Advances in Physiology Education*. 35: 168-177. PMID: 21652502.
10. **Sweazea KL***, Walker BR. (2011) High fat feeding impairs endothelin-1 mediated vasoconstriction through increased iNOS-derived nitric oxide. *Hormone and Metabolic Research*. 43: 470-476. PMID: 21448844.
9. **Sweazea KL***, Kanagy NL, Walker BR. (2011) Increased adiposity does not exacerbate impaired vasodilation in rats exposed to eucapnic intermittent hypoxia. *Respiration*. 81: 47-56. PMID: 20733283.

2010

8. **Sweazea KL***, Lekic M†, Walker BR. (2010) Comparison of mechanisms involved in impaired vascular reactivity between high sucrose and high fat diets in rats. *Nutrition and Metabolism*. 7: 48. PMID: 20525365.

2009

7. **Sweazea KL**, Walker BR*. (2009) Antioxidant and vasodilatory effects of heme oxygenase on mesenteric vasoreactivity following chronic hypoxia. *Microcirculation*. 16(2): 131-141. PMID: 19031291.

2008

6. Braun EJ*, Sweazea KL. (2008) Invited review: Glucose regulation in birds. *Comparative Biochemistry and Physiology*. 151B: 1-9. PMID: 18571448.

2006

5. Sweazea KL, McMurtry JP, Braun EJ*. (2006) Inhibition of lipolysis does not affect insulin sensitivity to glucose uptake in the mourning dove. *Comparative Biochemistry and Physiology*. 144B(3): 387-394. PMID: 16753324.
4. Sweazea KL, Braun EJ*. (2006) Glucose transporter expression in English sparrows (*Passer domesticus*). *Comparative Biochemistry and Physiology*. 144B(3): 263-270. PMID: 16730206.
3. Sweazea KL, Braun EJ*. (2006) Oleic acid uptake by *in vitro* English sparrow skeletal muscle. *Journal of Experimental Zoology*. 305A(3): 268-276. PMID: 16432889.
2. Marquez JM†, Sweazea KL, Braun EJ*. (2006) Skeletal muscle fiber composition of English sparrow (*Passer domesticus*). *Comparative Biochemistry and Physiology*. 143B: 126-131. PMID: 16330231.

2005

1. Sweazea KL, Braun EJ*. (2005) Glucose transport by English sparrow (*Passer domesticus*) skeletal muscle: Have we been chirping up the wrong tree? *Journal of Experimental Zoology*. 303A: 143-153. PMID: 15662664.

B. Invited Editorial

1. Sweazea KL*. (2014) Compounding evidence implicating Western diets in the development of metabolic syndrome. *Acta Physiologica*. 211(3): 471-473. PMID: 24751347.

C. Invited Book Chapter

1. Sweazea KL*, Johnston CS. Cardioprotective potential of flaxseeds in diabetes. (2019) In: *Bioactive foods as dietary interventions for diabetes, 2nd Edition*, Edited by Watson R, Preedy V. San Diego, CA: Elsevier, ch. 24.

D. Invited Teaching/Mentoring Articles

1. Sweazea KL*. (3/18/20) Involving students in the teaching experience. *Physiology Education Community of Practice (PECOP) blog. LifeScience Teaching Resource Community (LifeSci TRC)*.
<https://blog.lifescitrc.org/pecop/2020/03/18/involving-students-in-the-teaching-experience/>
2. Sweazea KL*. (7/25/19) Taking the road most traveled: Finding faculty positions in academia and knowing what to expect. *LifeScience Teaching Resource Community (LifeSci TRC) Mentoring Forum*.
<https://blog.lifescitrc.org/mentoringforum/2019/07/25/taking-the-road-most-traveled-finding-faculty-positions-in-academia-and-knowing-what-to-expect/>

E. Invited Book Review

1. Palumbri SR, Palumbri AR. *The Extreme Life of the Sea*. Princeton University Press, Princeton, NJ. Review published in: *The Physiologist*. 2014.

F. Other Publications

1. **Sweazea KL***. The 10th Annual Meeting of the Arizona Physiological Society. *The Physiologist*. 61(2): 157-158, 2018.

Abstracts of Poster Presentations

157. Wilkening JL, **Sweazea K**, Whipple A, Ray C*. (2024) Investigating measures of thermal stress in a climate sensitive mammal. North American Pika Consortium, Boulder, CO.
156. Figueiredo de Sousa M††, Ling J††, Asquieri ER., Whisner C, **Sweazea KL***. (2024) Examination of a novel dietary fiber formulation on morphology of young male Sprague-Dawley rats. 21st Midwest Congress on Production, Innovation and Food Safety, Goiânia, Brazil.
155. Lockett R††, Figueiredo de Sousa M††, **Sweazea KL***. (2024) Impact of urban diets on the nutritional physiology of mealworms. 2024 American Physiology Summit, Long Beach, CA.
154. Lockett R††, Figueiredo de Sousa M††, **Sweazea KL***. (2023) Impact of urban diets on the nutritional physiology of mealworms. 2023 Arizona Physiological Society, Glendale, AZ.
153. Gumprich E, Mohr AE††, **Sweazea KL**, Arciero PJ*. (2023) Multimodal intermittent fasting regimen with protein pacing shifts plasma metabolome, reflective of increased fat mobilization and macronutrient metabolism. Nutrition 2023, American Society for Nutrition, Boston, MA.
152. **Sweazea KL***. (2023) Super birds: The majority of avian blood metabolites are not altered by urban environments. 2023 British Ornithologists' Union, Nottingham, UK.
151. **Sweazea KL***, Basile AJ††, Kreisler AG†, Singh KC†. (2022) Low dose of metformin increases blood glucose in mourning doves, *Zenaida macroura*. 2022 APS Intersociety Meeting: Comparative Physiology – From Organisms to Omics in an Uncertain World, San Diego, CA.
150. Basile AJ††, Noshirwani N†, **Sweazea KL***. (2022) Ultra-processed foods: A fast-food restaurant menu and ingredient analysis. Arizona Academy of Nutrition and Dietetics (AZAND) annual meeting. Phoenix, AZ.
149. Noshirwani N†, Basile AJ††, **Sweazea KL***. (2022) Ultra-processed foods and fast-food restaurants: A menu and ingredient analysis. School of Life Sciences 29th Annual Undergraduate Research Symposium.
148. Kreisler AG†, Basile A††, **Sweazea KL***. (2022) The majority of avian blood metabolites are not altered in urban environments: Results from a systematic review. CAP LTER All Scientists Meeting.
147. Mohr AE††, **Sweazea KL***, (2022) Curbing high-fat induced perturbations in aortic perivascular adipose tissue in adolescent male Sprague-Dawley rats: Soil as therapy? 2022 Experimental Biology conference, Philadelphia.
146. **Sweazea KL***. (2021) A comparative approach towards improving glucose regulation and cardiovascular health. CHS Virtual Research Day.
145. Basile AJ††, Kreisler AG†, **Sweazea KL***. (2021) The majority of avian blood metabolites are not altered in urban birds: Results from a systematic review. Arizona Physiological Society annual conference, Glendale, AZ.
144. Morales AC†, Basile AJ††, Ruiz-Tejada††, Hjelm E†, Mohr AE††, Brand-Miller J, Atkinson F, **Sweazea KL***. (2021) Ultra-processed foods have a lower glycemic index and

- load compared to minimally processed foods. Arizona Physiological Society annual conference, Glendale, AZ.
143. Singh KC†, Basile AJ††, Watson DF†††, **Sweazea KL***. (2021) Effect of macronutrient and micronutrient manipulation on avian blood glucose concentration: A systematic review. Arizona Physiological Society annual conference, Glendale, AZ.
 142. Hjelm E†, Stanley E††, Basile A††, Ruiz-Tejada A††, **Sweazea KL***. (2021) Effect of food processing on total antioxidant capacity. School of Life Sciences Undergraduate Research Symposium.
 141. Singh K†, Basile AJ††, **Sweazea KL***. (2021) A systematic review of the effects of macronutrient manipulation on avian blood glucose concentration. School of Life Sciences Undergraduate Research Symposium.
 140. Weigand B††, Tasevska N*, **Sweazea K**, Lee C, Palma-Duran SA. (2021) Association of dietary sugars with serum advanced glycation end products in a controlled feeding study. Nutrition Live online. American Society of Nutrition annual conference.
 139. Stanley S††, Basile A††, Ruiz-Tejada A, Hjelm E†, **Sweazea K***. (2021) Effect of food processing on total antioxidant capacity. Nutrition Live Online. American Society of Nutrition annual conference.
 138. Jain R†, Al-Nakkash L, Bolch C, **Sweazea KL***. (2021) Evaluation of the relationship between genistein intake and diabetes and cardiovascular outcomes using 2009-2010 data from the National Health and Nutrition Examination Survey. Experimental Biology conference. *FASEB J.* 35.
 137. Basile AJ††, Renner M†, Kayata L†, Deviche P, **Sweazea KL***. (2021) A four-week urban diet impairs vasodilation but not nutritional physiology in wild-caught mourning doves (*Zenaida macroura*). Experimental Biology conference. *FASEB J.* 35.
 136. Mohr AE††, Basile AJ††, **Sweazea KL***. (2021) Differential impact of urban vs rural diets on gut microbiome composition and circulating endotoxin in mourning doves. Experimental Biology conference. *FASEB J.* 35.
 135. Numani A†, Mishra S†, **Sweazea K**, Davis MC, Lindblade CL, Plasencia JD*. (2020) Characterization of normal fetal heart size and function during mid and late *in utero* development. Arizona Physiological Society Conference.
 134. Basile AJ††, Renner M†, Kayata L†, Deviche P, **Sweazea KL***. (2020) A four-week urban diet does not alter nutritional physiology in wild-caught mourning doves (*Zenaida macroura*). Arizona Physiological Society Conference.
 133. Renner M†, Basile AJ††, Deviche P, **Sweazea KL***. (2020) An urban diet impairs tibial vasodilation in mourning doves (*Zenaida macroura*). Arizona Physiological Society Conference.
 132. Eghrari NB†, Wendt TS, Beer YB, **Sweazea KL**, Gonzales RJ*. (2020) Novel sphingosine-1-phosphate receptor ligand improves human brain endothelial cell viability following hypoxia plus glucose deprivation. ASU BioSci Southwest Symposium.
 131. Etebari S, Brownell S*, Grunspan D, Basile A††, Bethancourt H, **Sweazea K**. (2020) Beyond misconceptions: naïve ideas about human evolution and diet among nutrition students. Society for the Advancement of Biology Education Research conference. Virtual meeting due to Covid-19.
 130. Brown JA†††, Basile A††, Bateman H, Lerman S, Warren P, Deviche P, **Sweazea KL***. (2020) No fry zones: Birds response to restaurant distributions in Phoenix Metropolitan area. North American Congress on Conservation Biology, Denver, CO.

129. Basile AJ††, Renner M†, Scillian J††, **Sweazea KL***. (2020) Restricting calories on low-carbohydrate vs low-fat diets for weight loss: A systematic review and meta-analysis. American Society for Nutrition annual conference, Seattle, WA.
128. So M, Bartel R†, Tat T, **Sweazea K**, Gonzales RJ*. (2020) Doxorubicin dose dependently altered cyclooxygenase-2 levels in primary human vascular smooth muscle cells. ABRC-Flinn Foundation Research Conference, Phoenix, AZ.
127. Mohr AE††, Reiss RA, Sena J, Naik JS, Walker BR, **Sweazea KL***. (2020) A gene expression profile of metabolic dysfunction in the aorta following a short-term high fat diet. Experimental Biology conference, San Diego, CA. *FASEB J.* 34: 1-1.
126. Basile AJ††, Kirkton S, Hedrick MS, **Sweazea KL***. (2020) Modern Comparative Physiology: Under Krogh's Umbrella. Experimental Biology conference, San Diego, CA. *FASEB J.* 34: 1-1.
125. Funk A†, Hutton P, Earl SR, Deviche P, **Sweazea KL***. (2020) Effects of urbanization on morphology and nutritional physiology of Gambel's quail, *Callipepla gambelii*. CAP LTER All Scientists Meeting and Poster Symposium, Tempe, AZ.
124. Brown JA†††, Basile A††, Bateman H, Lerman S, Warren P, **Sweazea KL***. (2020) No fry zones: Birds response to restaurant distributions in Phoenix Metropolitan area. CAP LTER All Scientists Meeting and Poster Symposium, Tempe, AZ.
123. Basile A††, **Sweazea KL***. (2019) Under Krogh's Umbrella: Comparative Physiology in a new age. Arizona Physiological Society conference, Tempe, AZ.
122. Funk A†, Hutton P††, Earl S, Deviche P, **Sweazea KL***. (2019) Effects of urbanization on morphology and nutritional physiology of Gambel's Quail, *Callipepla gambelii*. Arizona Physiological Society, Tempe, AZ.
121. Mohr A††, Crawford M††, **Sweazea KL***. (2019). Assessing the potential of a soil-derived compound for the prevention of liver toxemia and protein glycation in rats fed a high-fat diet. Arizona Physiological Society, Tempe, AZ.
120. Nelson M††, Crawford M††, **Sweazea KL***. (2019) Evaluation of an organometallic complex on the development of cardiovascular disease risk following a 10-week high-fat diet. Arizona Physiological Society conference, Tempe, AZ.
119. Basile AJ††, Clark W†, Shi X†††, Jasbi P†, Gu H, Deviche P, **Sweazea KL***. (2019) Diet-related physiological plasticity of mourning dove: A metabolomics approach. Nutrition 2019, Annual American Society for Nutrition conference, Baltimore, MD.
118. Whisner CM*, Argo KB†, **Sweazea KL**, Al-Nakkash, L. Impacts of genistein on the gut microbiota of a mouse model of cystic fibrosis. Nutrition 2019, Annual American Society for Nutrition conference, Baltimore, MD.
117. Basile AJ††, Clark W†, Shi X†††, Gu H, Deviche P, **Sweazea KL***. (2019) Mourning doves, *Zenaida macroura*, are resistant to metabolic and vascular effects of a mammalian diabetogenic refined carbohydrate diet. CAP LTER All Scientists Meeting and Poster Symposium, Tempe, AZ.
116. Crawford M††, **Sweazea KL***. (2019) 10-Week high-fat diet promotes endotoxemia and alters microbial taxonomy in male adolescent rats. Experimental Biology conference, Orlando, FL. *FASEB J.* 33: 583.3.
115. Mohr AE††, Girard M††, Rowe M, McGraw KJ, **Sweazea KL***. (2019) Varied effects of dietary carotenoid supplementation on oxidative damage in tissues of two waterfowl species. Experimental Biology Conference, Orlando, FL. *FASEB J.* 33: 545.2.

114. Basile AJ††, Shi X†††, Jasbi P††, Gu H, Deviche P, **Sweazea KL***. (2019) Mourning doves, *Zenaida macroura*, are resistant to metabolic effects of a high fat diet. Experimental Biology conference, Orlando, FL. *FASEB J.* 33: 545.5.
113. Mohr A††, Girard M††, Rowe M††, McGraw KJ, **Sweazea KL***. (2018) Varied effects of dietary carotenoid supplementation on oxidized lipoproteins in tissues of two waterfowl species. Arizona Physiological Society conference, Tempe, AZ.
112. Basile AJ††, Clark W†, Shi X††, Gu H, Deviche P, **Sweazea KL***. (2018) Mourning doves, *Zenaida macroura*, are resistant to metabolic and vascular effects of a mammalian diabetogenic refined-carbohydrate diet. Arizona Physiological Society Conference, Tempe AZ.
111. Crawford M††, **Sweazea KL***. (2018) 10-Week high fat diet promotes endotoxemia and alters microbial taxonomy in male adolescent rats. Arizona Physiological Society Conference, Tempe, AZ.
110. Starr AR†, Crawford M††, **Sweazea KL***. (2018) Examination of an organometallic complex on insulin resistance in adolescent male rats following a 10-week high fat diet. Arizona Physiological Society conference, Tempe, AZ.
109. Wood C†, Crawford M††, **Sweazea KL***. (2018) Novel organometallic complex prevents high fat diet-induced liver injury in male Sprague-Dawley rats. Arizona Physiological Society conference, Tempe, AZ.
108. Crawford M††, Clark W†, **Sweazea KL***. (2018) Novel organometallic complex prevents metabolic risk factors in male adolescent rats consuming a high fat diet for 10 weeks. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 32: 719.5.
107. Basile AJ††, Jarrett C†††, **Sweazea KL***. (2018) Relationship between dietary profile and blood glucose concentration in birds. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 32: 602.3.
106. Clark W†, Basile AJ††, Deviche P, **Sweazea KL***. (2018) Consumption of a refined carbohydrate diet does not impair vasodilation of cranial tibial arteries in the mourning dove, *Zenaida macroura*. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 32: 860.4.
105. Tat T, Bartel R†, So M, **Sweazea K**, Gonzales RJ. (2018) Doxorubicin temporally modulates cyclooxygenase-2 levels in male and female human vascular smooth muscle cells. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 32: 700.6.
104. Bartel R†, Rahman S†, DeCourt B, **Sweazea KL**, Gonzales RJ. (2018) Lenalidomide attenuates high fat diet induced-cyclooxygenase-2 levels in human vascular smooth muscle cells. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 32: 700.7.
103. Basile AJ†, Jarrett CL††, Witt C, **Sweazea KL***. (2018) Evolution of naturally high plasma glucose concentrations in birds. 2018 Experimental Biology Conference, San Diego, CA. *FASEB J.* 860.5.
102. Tat T, So M, Bartel R†, **Sweazea KL**, Gonzales RJ*. (2018) Doxorubicin temporarily modulates cyclooxygenase-2 levels in male and female human vascular smooth muscle cells. University of Arizona Tucson Undergraduate Biology Research Program Poster Session.
101. Clark W†, **Sweazea KL***. (2017) Consumption of a refined carbohydrate diet does not impair vasodilation of cranial tibial arteries from mourning doves (*Zenaida macroura*). 2017 Arizona Physiological Society Conference, Flagstaff, AZ. Abstract #F4.

100. Mayra SM††, Mayol-Kreiser S, Johnston CS*, **Sweazea KL**. (2017) Comparison of High-Nitrate versus Low-Nitrate Diets on Cardiovascular Health in Post-Menopausal Women. 2017 Arizona Physiological Society conference, Flagstaff, AZ. Abstract #F14.
99. Crawford M††, Clark W†, **Sweazea KL***. (2017) Novel organometallic complex lowers non-HDLc in male adolescent rats following 10-week high fat diet. 2017 Arizona Physiological Society conference, Flagstaff, AZ. Abstract #S6.
98. Basile A††, Caskey A†, Jarrett C††, **Sweazea KL***. (2017) Relationship between animal class and dietary profile on blood glucose concentrations. 2017 Arizona Physiological Society conference, Flagstaff, AZ. Abstract #S2.
97. Gonzales RJ*, Tat T, So M, Bartel R†, **Sweazea KL**. (2017) Doxorubicin temporally modulates cyclooxygenase-2 levels in human vascular smooth muscle cells. 2017 Arizona Physiological Society conference, Flagstaff, AZ. Abstract #S10.
96. Rahman S, Bartel R†, DeCourt B, **Sweazea KL**, Gonzales RJ*. (2017) Lenalidomide attenuates high fat diet induced cyclooxygenase-2 levels in primary human vascular smooth muscle cells. 2017 Arizona Physiological Society conference, Flagstaff, AZ. Abstract #S19.
95. Mayra S††, **Sweazea K***, Johnston C, Mayol-Kreiser S. (2017) Comparison of high-nitrate versus low-nitrate diets on cardiovascular health in post-menopausal women. 2017 Arizona Academy of Nutrition and Dietetics, Phoenix, AZ.
94. Crawford M††, Liss T†, **Sweazea KL***. (2017) Short term high fat feeding alters expression of glucoregulatory proteins in skeletal muscle of male adolescent rats. *FASEB J.* 31: 710.8.
93. Crawford M††, Whisner C, **Sweazea KL***. (2017) Examination of changes in intestinal microbiota induced by high fat feeding in male adolescent rats. *FASEB J.* 31: 891.1.
92. **Sweazea KL***, Johnston CS, Miller B, Gumprecht E. (2017) Beet juice energy drink increases nitric oxide bioavailability and lowers blood pressure in healthy men. *FASEB J.* 31(1 Suppl): 966.10.
91. Awwad IM, D'Lugos AC, Carroll CC, Gonzales RJ, **Sweazea KL**, Dickinson JM, Angadi SS, Hale TM*. (2017) Exercise preconditioning as a means to protect the kidney against doxorubicin-induced oxidative stress. *FASEB J.* 31: 819.1.
90. Crawford M††, Whisner C, **Sweazea KL***. (2016) Preliminary examination of changes in intestinal microbiota induced by high fat feeding in male adolescent rats. 2016 Sigma Xi, The Scientific Research Society conference, Atlanta, GA.
89. Crawford M††, Whisner C, **Sweazea KL***. (2016) Preliminary examination of changes in intestinal microbiota induced by high fat feeding in male adolescent rats. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #F6.
88. O'Neill LM†, Mayek RE, Jarrett CL††, Crawford M††, D'Lugos A††, Carroll CC, Angadi SS, Gonzales R, Hale TM, Dickinson JM, **Sweazea KL***. (2016) High-intensity exercise preconditioning prevents downregulation of eNOS expression in the aorta following Doxorubicin treatment. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #S32.
87. Eagleman D†, Mahrer K†, **Sweazea KL***. (2016) Putative role of uric acid as an antioxidant in avian arteries. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #S29.
86. Crawford M††, Liss T†, **Sweazea KL***. (2016) Short term high-fat feeding alters expression of glucoregulatory proteins in skeletal muscle of male adolescent rats. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #F5.

85. Khokar B, Perez O, D'Lugos AC††, Carroll CC, Gonzales RJ, **Sweazea KL**, Dickinson JM, Angadi SS, Hale TM*. (2016) Impact of high intensity interval training on Doxorubicin-induced pathological cardiac remodeling in female Sprague-Dawley rats. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #S31.
84. Perez O, Khokar B, Abidali H, D'Lugos A††, Carroll CC, Gonzales RJ, **Sweazea KL**, Dickinson JM, Angadi SS, Hale TM*. (2016) Impact of high intensity interval training on Doxorubicin-induced cardiotoxicity in female Sprague-Dawley rats. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #F21.
83. Awwad I, D'Lugos AC††, Carroll CC, Gonzales RJ, **Sweazea KL**, Dickinson JM, Angadi SS, Hale T*. (2016) Exercise preconditioning as a means to protect against Doxorubicin-induced renal injury. 2016 Arizona Physiological Society conference, Tucson, AZ. Abstract #F2.
82. Ahmed Z†, Jarrett CL††, Faust JJ†††, **Sweazea KL***. (2016) High glucose-mediated oxidative stress impairs vasodilation of small resistance skeletal muscle arteries from mourning doves (*Zenaida macroura*). *FASEB J.* 30: 760.7.
81. Crawford M††, Liss T†, Calhoun M†, **Sweazea KL***. (2016) In the short term, poor nutrition promotes simple steatosis without inflammation in adolescent rats. *FASEB J.* 30: 1249.1.
80. **Sweazea KL***, Braun EJ. (2016) Preliminary examination of a role for insulin in the regulation of glucose excretion in mourning doves (*Zenaida macroura*). *FASEB J.* 30: 976.2.
79. O'Neill LM†, Jarrett CL††, Crawford M††, Carroll CC, Hale TM, Dickinson JM, Angadi SS, **Sweazea KL***. (2015) Evaluation of the vasoprotective effects of high-intensity exercise prior to anthracycline chemotherapy. 2015 Arizona Physiological Society conference, Glendale, AZ. Abstract #S20.
78. Crawford M††, Liss T†, Calhoun M†, **Sweazea KL***. (2015) In the short term, poor nutrition promotes simple steatosis without inflammation in adolescent rats. 2015 Arizona Physiological Society conference, Glendale, AZ. Abstract #F6.
77. Vijayavel N, Raman P, Kerrigan C, Echeverria J, Dickinson J, Hale T, **Sweazea K**, Carroll C, Angadi S, Gonzales RJ*. Doxorubicin alters COX-2 expression in brain and pial arteries from ovariectomized female rats. 2015 Arizona Physiological Society conference, Glendale, AZ. Abstract #S22.
76. Connick M, Salazar C, Baymiller M, Reiss R*, **Sweazea K**. (2015) Next generation sequencing reveals a role for hemoglobin in metabolic dysfunction. 2015 New Mexico Bioinformatics Symposium.
75. Gonzales RJ*, Raman P, Vijayavel N, Kerrigan C, Echeverria J, Dickinson JM, Hale T, **Sweazea K**, Carroll C, and Angadi SS. Doxorubicin reduces proinflammatory mediator expression in brain and pial arteries from ovariectomized female rats. 2015 APS Sex and Gender Meeting, Annapolis, MD.
74. **Sweazea KL***, Borges C, Zuck J††, Rayle S†. (2015) Unraveling the avian paradox: Avian resistance to protein glycation. *FASEB J.* 29: LB642.
73. Ricklefs K††, Johnston CS, **Sweazea KL***. (2015) Therapeutic use of ground flaxseeds for type 2 diabetes. *FASEB J.* 29: 912.11.
72. Raad NA†, Rehder DS, Sherma N, Beezhold BL, Johnston CS, Borges CS, **Sweazea K***. (2015) Replacing dietary meat with fish increases plasma glucose without affecting protein glycation. *FASEB J.* 29: 912.8.

71. Faust J††, Malenica I†, Doshi M, Stepanek R, Brower J†††, **Sweazea K**, Caplan MR, Herman R*. (2014) Pancreatic β -cell function and mass in pubertal hyperinsulinemia. 2014 Biomedical Engineering Society Conference, San Antonio, TX. Abstract # P-Th-459
70. Ricklefs K††, Simperova A†, Reaven P, Sands M†††, **Sweazea KL***. (2014) Downregulation of the vascular insulin signaling pathway may contribute to hyperglycemia following high fat intake. 2014 Arizona Physiological Society Conference, Tucson, AZ. Abstract #F17.
69. Raad N†, Rehder DS, Sherma ND†, Beezhold BL, Johnston CS, Borges CR, **Sweazea KL***. (2014) Replacing dietary meat with fish significantly increases plasma glucose without affecting protein glycation. 2014 Arizona Physiological Society Conference, Tucson, AZ. Abstract #S18.
68. **Sweazea K***, Borges C, Rayle S†. (2014) The avian paradox: Avian resistance to protein glycation. 2014 Comparative and Evolutionary Physiology Intersociety meeting. *The Physiologist*. 58(1): 23.18.
67. Simperova A†, Ricklefs K††, Al-Nakkash L, Faust JJ††, **Sweazea KL***. (2014) Genistein-enriched diet tends to increase oxidative stress in the vasculature of female *ob/ob* mice. *FASEB J*. 28: 693.9.
66. Ricklefs K††, Simperova A†, Reaven P, Sands M†††, **Sweazea KL***. (2014) Impaired insulin-mediated vasodilation may contribute to hyperglycemia following high fat intake. *FASEB J*. 28: 1030.1.
65. Calhoun M†, McGraw K, **Sweazea KL***. (2014) Variations in pancreatic glucoregulatory hormones in birds. *FASEB J*. 28: 1101.1.
64. **Sweazea KL***, Johnston CS, Ricklefs K††, Petersen K††, Alanbagy S††. (2014) Almond supplementation without dietary advice significantly reduced C-reactive protein in subjects with poorly-controlled type 2 diabetes. *FASEB J*. 28: 830.24.
63. **Sweazea KL***, Jarrett C††, Faust JJ††. (2014) Oxidative stress impairs vasodilation of *ex vivo* arteries from mourning doves (*Z. macroura*). *FASEB J*. 28: 880.3.
62. Simperova A†, Al-Nakkash L, Faust JJ††, Ricklefs K††, **Sweazea KL***. (2014) Genistein-enriched diet tends to increase oxidative stress in the vasculature of female *ob/ob* mice. SOLUR Undergraduate Research Poster Symposium, SOLS, ASU.
61. Reiss RA*, **Sweazea K**, Naik V, Cameron C, Lindquist I, Mudge J, Miller N, Schikley F, Walker B. (2014) Non-coding RNAs as potential modulators of metabolic dysfunction. 2014 Long Non-coding RNA, Marching toward Mechanisms conference, Santa Fe, NM.
60. Calhoun M†, McGraw K, **Sweazea KL***. (2013) Variations in pancreatic regulation of glucose homeostasis in birds. 2013 Arizona Physiological Society Conference, Phoenix, AZ. Abstract #S14.
59. Simperova A†, Ricklefs K††, Faust JJ††, Al-Nakkash L, **Sweazea KL***. (2013) Putative protective effects of genistein in the vasculature of female *ob/ob* mice. 2013 Arizona Physiological Society Conference, Phoenix, AZ. Abstract #S19.
58. Ricklefs K††, Simperova A†, Reaven P, Sands M†††, **Sweazea KL***. (2013) Downregulation of the vascular insulin signaling pathway may contribute to hyperglycemia following high fat intake. 2013 Arizona Physiological Society Conference, Phoenix, AZ. Abstract #F8.
57. Liss T†, **Sweazea K***. (2013) Evaluation of inflammatory response and lipid concentration after high fat diet. 12th Annual Barrett, The Honors College, Celebrating Honors Symposium of Research and Creative Projects, ASU.

56. Petersen KN††, Ricklefs K††, Alanbagy S††, Johnston CS, **Sweazea KL***. (2013) Almond consumption reduces diastolic blood pressure in men with type 2 diabetes. *FASEB J.* 27: 1b422.
55. Ricklefs K††, Petersen K††, Alanbagy S††, Johnston CS, **Sweazea KL***. (2013) Investigating the effects of 12-week almond consumption in type 2 diabetes. *FASEB J.* 27: 1b424.
54. **Sweazea KL***, Baluch D, Traynor K††, Cease A††, Coulombe M, Stout V. (2013) Jumpstarting STEM careers. *FASEB J.* 27: 740.1.
**This poster was presented through the APS Teaching Section and offered ideas for designing physiology-related career development workshops for trainees and faculty.*
53. Wilkening J††*, Ray C, **Sweazea K**. (2012) Using fecal samples to measure physiological stress in American pikas. 97th Ecological Society of America annual meeting, Portland OR.
52. Ricklefs K††, Soweidan D†, Jarrett CJ††, **Sweazea KL***. (2012) Effects of acute exposure to high glucose on tissue oxidative stress. The Arizona Physiological Society Conference, Tucson, AZ. Abstract #F27.
51. Calhoun M†, Witt C, **Sweazea KL***. (2012) Variations in glucose across phylogenetically distinct avian species. The Arizona Physiological Society Conference, Tucson, AZ. Abstract #F18.
50. Liss T†, Frahm C†, **Sweazea KL***. (2012) Lipid infiltration of rodent liver and pectoralis muscles following 6 weeks of high caloric intake. The Arizona Physiological Society Conference, Tucson, AZ. Abstract #F21.
49. Juan TK†, Jarrett CL††, Brant S, **Sweazea KL***. (2012) Pathophysiological consequences of schistosome infections in mourning doves (*Zenaida macroura*). The Arizona Physiological Society Conference, Tucson, AZ. Abstract #5.
48. Baluch DP*, Traynor K††, Cease A††, Coloumbe M, Stout V, **Sweazea KL**. Jumpstarting STEM careers. 2012 American Society for Cell Biology Conference, San Francisco, CA.
**This poster presentation offered ideas for creating STEM-related career development workshops for faculty.*
47. Rodriguez N†, Jarrett CL††, **Sweazea KL***. (2012) Hopscotch through the heart: Teaching cardiovascular physiology to 2nd graders. 2012 Experimental Biology Conference, San Diego, CA.
**This presentation reviewed the “Hopscotch through the heart” game that I developed to help teach elementary school students about cardiac physiology.*
46. **Sweazea KL**, Brower J†††, Faust J††, Malenica I†, Herman R*. (2012) Islet dysfunction in rats fed a high fat diet (HFD): A structure–function study. *FASEB J.* 26: 1113.3.
45. Juan TK†, Jarrett CL††, **Sweazea KL***. (2012) Immune responses to parasitic infections in mourning doves (*Zenaida macroura*). *FASEB J.* 26: 1072.9.
44. Liss T†, Reiss RA, **Sweazea KL***. (2012) High fat feeding leads to inflammation and depressed markers of immune system reactivity in rats. *FASEB J.* 26: 680.16.
43. Jarrett CL††, **Sweazea KL***. (2012) *In vitro* effects of acute exposure to hyperglycemic conditions on endothelium-dependent vasodilation in mourning doves (*Zenaida macroura*). *FASEB J.* 26: 886.7.
42. Garcia MD††, Bryant S†, Baeza M†, **Sweazea K**, Reiss R*. (2012) The role of diet in the regulation of the nuclear hormone receptor gene Nr4a2 in rats exhibiting metabolic dysfunction. 2012 New Mexico Bioinformatics, Science and Technology Symposium, Santa Fe, NM.

41. Jarrett CL††, Lekic M†, Smith C†, **Sweazea KL***. (2011) Acetylcholine-mediated vasodilation is dependent on the activation of potassium channels in mourning doves (*Zenaida macroura*). The Arizona Physiological Society Conference, Tucson, AZ. Abstract #13.
40. Ray C*, **Sweazea KL**. (2011) Signs of demographic change and physiological stress in Rocky Mountain pikas. 2011 Ecological Society of America Conference, Austin, TX. Abstract #COS 106-9.
39. Hostetter K†, **Sweazea KL**, Braun EJ*. (2011) A comparison of avian pancreatic islets. *FASEB J.* 25: 859.11.
38. Jarrett C††, Lekic M†, Smith C†, **Sweazea KL***. (2011) Mechanisms of acetylcholine-mediated vasodilation in arterioles from mourning doves (*Zenaida macroura*). *FASEB J.* 25: 858.13.
37. Kuzmiak S††, Schmidt E, **Sweazea K**, Willis W*. (2010) Pyruvate sparing by fatty acid and glutamate in sparrow skeletal muscle mitochondria. 2010 Arizona Physiological Society Conference, Glendale, AZ. Abstract #F-9.
36. Lekic M†, Jarrett C††, Smith C†, **Sweazea KL***. (2010) Characterization of Ach-mediated vasodilation in tibialis and mesenteric arteries isolated from mourning doves. 2010 Arizona Physiological Society Conference, Glendale, AZ. Abstract #S
35. Kuzmiak S††, Schmidt E, **Sweazea K**, Willis W*. (2010) Pyruvate sparing by fatty acid and glutamate in sparrow skeletal muscle mitochondria. ACSM Conference on Integrative Physiology of Exercise, Miami Beach, FL.
34. **Sweazea KL***, Sparr R†, Braun EJ. (2010) The regulatory role of insulin in avian kidneys. 2010 APS Intersociety Meeting: Global Change and Global Science: Comparative Physiology in a Changing World, Westminster, CO. Abstract #20.26.
33. Rodriguez N†, Davies S††, Deviche P, **Sweazea KL***. (2010) Metabolic effects of stress in rural and urban male Abert's Towhees. 2010 APS Intersociety Meeting: Global Change and Global Science: Comparative Physiology in a Changing World, Westminster, CO. Abstract #12.43.
32. Aguirre LE†††, De Leon X†, **Sweazea KL**, Walker BR, Colleran K, Kanagy NL*. (2010) Effects of intermittent hypoxia on blood pressure, serum plasminogen activator inhibitor 1 and glucose metabolism in male Sprague Dawley rats. The 92nd Annual Endocrine Society Annual Meeting, San Diego, CA. Abstract #P3-465.
31. Davies S††, Rodriguez N†, **Sweazea KL**, Deviche P*. (2010) The influence of acute stress on glucose and protein utilization of a desert songbird. 25th International Ornithological Congress, Sao Paulo, Brazil.
30. Aguirre LE†††, DeLeon X†, **Sweazea KL**, Walker BR, Colleran K, Kanagy N*. (2010) Intermittent hypoxia causes hypertension and insulin resistance in male Sprague Dawley rats. *J Invest Med.* 58(1): 134.
29. Sparr R†, Braun EJ, **Sweazea KL***. (2010) Putative role for insulin in glucose regulation by avian kidneys. *FASEB J.* 24: 1b614.
28. Kuzmiak S††, Glancy B†††, **Sweazea KL**, Willis W*. (2010) Mitochondrial function in sparrow pectoralis muscle. *FASEB J.* 24: 1055.15.
27. Lekic M†, Walker BR, **Sweazea KL***. (2010) Mechanisms of impaired acetylcholine-mediated vasodilation in overweight rats. *FASEB J.* 24: 592.3.
26. Fokidis HB††, Sparr R†, Deviche P*, **Sweazea KL**. (2010) Modeling changes in energetic substrate usage during the acute stress response of birds. *FASEB J.* 24: 849.4.

25. Rodriguez N†, Davies S††, Deviche P, **Sweazea KL***. (2010) Stress-induced variation in protein utilization and plasma glucose in a male passerine bird from urban and rural populations. *FASEB J.* 24: 1055.3.
24. Hostetter K††, **Sweazea KL**, Braun EJ*. (2010) The avian pancreatic islets, a comparison across species, *FASEB J.* 24: 1055.9.
23. Anthony C††, **Sweazea KL**, Braun EJ*. (2010) The analysis of avian plasma for glycated serum albumin. *FASEB J.* 24: 1055.7.
22. Davies S††, **Sweazea KL**, Deviche P*. (2010) The influence of acute stress on glucose and protein utilization of a desert songbird. 2010 Central Arizona-Phoenix Long Term Ecological Research (CAP LTER) Poster Symposium, Tempe, AZ.
21. Fokidis HB††, Sparr R†, **Sweazea KL**, Deviche P*. (2010) Species-specific habitat-associated changes in lipolytic metabolites during the avian stress response. 2010 Society for Integrative and Comparative Biology (SICB) Conference, Seattle, WA. Abstract #P3.126.
20. Davies S††, **Sweazea KL**, Deviche P*. (2010) The influence of acute and chronic stress on plasma glucose of a desert songbird. 2010 SICB Conference, Seattle, WA. Abstract #P3.127.
19. Smith C†, Braun EJ, Walker BR, **Sweazea KL***. (2009) Resistance to oxidative stress in avian blood vessels. 2009 Arizona Physiological Society Conference, Tucson, AZ. Abstract #D-1.
18. Anthony CM††, **Sweazea KL**, Braun EJ*. (2009) The analysis of avian plasma for glycated serum albumin. 2009 Arizona Physiological Society Conference, Tucson, AZ. Abstract #C-3.
17. Hostetter K††, **Sweazea KL**, Braun EJ*. (2009) Pancreatic beta and alpha cell expression patterns across avian species. *FASEB J.* 23: 778.8.
16. Braun EJ*, **Sweazea KL**. (2008) Meta-analysis of plasma glucose concentrations in birds and mammals. 9th International Symposium on Avian Endocrinology, Leuven, Belgium.
15. **Sweazea KL***, Wolf BO, Braun EJ, Walker BR. (2008) High blood glucose is not associated with oxidative stress or vascular dysfunction in birds. *FASEB J.* 22: 1239.24.
14. **Sweazea KL***, Kanagy NL, Walker BR. (2008) Impaired myogenic tone in overweight rats exposed to simulated sleep apnea is due to elevated iNOS-derived nitric oxide. *FASEB J.* 22: 732.4.
13. **Sweazea KL**, Kanagy NL, Walker BR*. (2007) Impaired vasoconstriction in high fat fed rats exposed to simulated sleep apnea is due to elevated iNOS-derived nitric oxide. American Heart Association, 61st Annual High Blood Pressure Research Conference, Abstract #P50.
12. **Sweazea KL***, McMurtry JP, Elsey RM, Redig P, Braun EJ. (2007) Hormonal control of metabolic substrate use by birds and reptiles. *FASEB J.* 21: 963.14.
11. **Sweazea KL** and Walker BR*. (2007) Myogenic reactivity in mesenteric arteries of high fat fed rats. *FASEB J.* 21: 964.4.
10. **Sweazea KL***, McMurtry JP, Elsey R, Braun EJ. (2006) Comparison of avian and reptilian plasma glucose and ketone body levels. *The Physiologist*. Abstract #24.10.
9. **Sweazea KL**, Walker BR*. (2006) Heme oxygenase decreases reactive oxygen species in mesenteric resistance arteries. *FASEB J.* 20: A1453.
8. **Sweazea KL**, Casotti GI, Braun EJ*. (2006) Characterization of sodium-glucose co-transporters in the avian kidney. *FASEB J.* 20: A1466.
7. **Sweazea KL**, McMurtry JP, Braun EJ*. (2006) Inhibition of fatty acid lipolysis does not affect insulin sensitivity to glucose uptake in the mourning dove. *FASEB J.* 20: A1465-A1466.

6. Braun EJ*, **Sweazea KL**. (2005) Uptake of oleic acid by avian skeletal muscle. *FASEB J.* 19: 665.13.
5. **Sweazea KL**, Braun EJ*. (2005) Substrate preference by avian skeletal muscle. *FASEB J.* 19: 665.12.
4. Braun EJ*, **Sweazea KL**. (2004) In vitro uptake of glucose by avian skeletal muscle. *FASEB J.* 18: 825.4.
3. **Sweazea KL**, Braun EJ*. (2004) Immunolocalization of glucose transporters 1 and 3 in English sparrow skeletal muscle. *FASEB J.* 18: 825.5.
2. **Sweazea KL**, Braun EJ*. (2003) Glucose transport in skeletal muscle of *Passer domesticus*, the common house sparrow. *FASEB J.* 17: 570.16.
1. **Sweazea KL**, Braun EJ*. (2002) Expression of glucose transporter-4 (GLUT4) in avian skeletal muscle. *FASEB J.* 16: 360.5.

INVITED SEMINARS

International

- Sep 2023 **Atkinson F**, **Basile AJ**††, **Tajeda AR**, **Mohr A**††, **Morales A**†, **Hjelm E**†, **Brand-Miller J**, **Sweazea KL***. “Glycemic Index and Ultra-Processed Foods: Results from Large-scale Analysis Using NOVA Classification,” 5th International Carbohydrate Quality Consortium (ICQC) Meeting, Catania, Italy.
- May 2023 **Sweazea K***, **Basile A**††, **Kreisler A**†, **Hassen R**†, **Singh K**†, **Symes M**†, **Larson G**†, **Figueiredo de Sousa M**††. “Acute metformin induces hyperglycemia in healthy adult mourning doves, *Zenaida macroura*.” North American Society for Comparative Endocrinology (NASCE), Queretaro, Mexico.
- May 2021 **Deviche P***, **Sweazea KL***. “Past and future: The impact of urbanization on avian physiology”, 6th Biennial North American Society for Comparative Endocrinology (NASCE) international conference
- May 2021 **Basile A**††, **Renner MW**†, **Kayata L**†, **Mohr AE**††, **Deviche P**, **Sweazea KL***. “A four-week urban diet impairs vasodilation but not nutritional or metabolic physiology in wild-caught mourning doves (*Zenaida macroura*)”, 6th Biennial NASCE international conference.
- Jul 2020 **Sweazea KL***. *Lipids* Invited Seminar: “Implications of short-term high-fat intake on gut, liver, and cardiovascular health of adolescent male rats” 2020 AOCS Annual Meeting and Expo, Expo in Montréal, Quebec, Canada *In person meeting cancelled because of COVID-19; Virtual presentation

National

- Apr 2023 **Sweazea KL***. “Glucose regulation in mammals and other vertebrates”, American Physiology Summit (American Physiological Society), Long Beach, CA.
- Jun 2022 **Basile A**††, **Ruiz-Tejada A**††, **Mohr AE**††, **Morales AC**†, **Hjelm E**†, **Brand-Miller J**, **Atkinson F**, **Sweazea KL***. “Ultra-processed foods have a lower glycemic index and load compared to minimally processed foods”, Nutrition 2022 Live Online conference sponsored by the American Society for Nutrition.
- Apr 2019 **Sweazea KL***. “The road most traveled: The academic career path”, Microhub, Career Central, Experimental Biology conference, Orlando, FL

- Apr 2019 **Crawford M††**, Sweazea KL*. “10-Week high-fat diet promotes endotoxemia and alters microbial taxonomy in male adolescent rats.” Featured Topic – John Forte Plenary Session, Experimental Biology conference, Orlando, FL.
- Apr 2019 **Mohr AE††**, **Girard M††**, Rowe M, McGraw KJ, Sweazea KL. (2019) “Varied effects of dietary carotenoid supplementation on oxidative damage in tissues of two waterfowl species.” Featured Topic – Trainee Session, Experimental Biology Conference, Orlando, FL.
- Apr 2017 **Sweazea KL***. “Selecting a good mentor and lab for an academic postdoc”, Women in Physiology Committee Symposium 2017: *Choosing the right lab and personnel for your career*. 2017 Experimental Biology conference, Chicago, IL. Video available on the APS website: <http://www.the-aps.org/choosing-a-lab-and-personnel>
- May 2016 **Sweazea KL***. “Avian vascular physiology”, Vascular Physiology Group, Department of Cell Biology and Physiology, University of New Mexico, Albuquerque, NM
- Apr 2016 **Sweazea KL***. “Preliminary examination of a role for insulin in the regulation of glucose excretion in mourning doves (*Zenaida macroura*),” 2016 Experimental Biology conference, San Diego, CA.
- Feb 2015 **Sweazea KL***. “Exploration of apparent resistance to hyperglycemia-related pathologies in birds,” Brasel Basic Science Seminar, Harbor-UCLA Medical Center.
- April 2014 **Sweazea KL***. “Oxidative Stress Impairs Vasodilation of *Ex Vivo* Arteries from Mourning Doves (*Z. macroura*),” Comparative Physiology of Aging and Senescence Symposium, Experimental Biology Conference, San Diego, CA.
- August 2010 **Sweazea KL***. “Taking the Road Most Traveled: Comparative Physiology Positions in Academia,” 2010 APS Intersociety Meeting, Global Change and Global Science: Comparative Physiology in a Changing World, Westminster Colorado.
- April 2007 **Sweazea KL***. “Diet-induced Vascular Dysfunction,” Featured Topics Session, Experimental Biology Conference, Washington, DC.

Local/State

- Oct 4, 2024 **Sweazea KL***. “Blood glucose regulation in vertebrates: Unique solutions for glucose regulation and insulin resistance”, Biomimicry in Medicine conference, Phoenix, AZ
- June 2022 **Sweazea KL***. “Healthy Mind, Healthy Body”, Keynote speaker for Arizona Hellenic Foundation’s Scholarship luncheon, Tempe, AZ
- Feb 2020 **Sweazea KL***. “Comparative Analysis of Glucose and Diabetes”, Mayo Clinic Selective Seminar, ASU, Tempe campus
- Jan 2020 **Sweazea KL***. “Potential influence of diet on urban birds”, Adapting to City Life Symposium, All Scientists Meeting, CAP-LTER Program, Scottsdale, AZ
- Mar 2019 Invited Faculty Panelist, *Discussion on Mentoring*, GPSA Mentoring and Well-being Summit, ASU
- Mar 2018 Invited Panelist for “Preparing and Presenting Research Posters”, SOLUR Seminar program, ASU

- Oct 2016 **Eagleman D†***, **Mahrer K†**, Sweazea KL. (2016) “Putative role of uric acid as an antioxidant in avian arteries.” 2016 Arizona Physiological Society conference, Tucson, AZ
- Nov 2015 **Sweazea KL***. “Physiology Outreach,” 2015 Arizona Physiological Society conference, Glendale, AZ
- Oct 2015 “STEM Careers and Pathways” panel discussion member, Association for Women in Science – Central Arizona Chapter, ASU
- Oct 2014 **Sweazea KL***. “Understanding Diabetes through Animal Models,” Nutrition Undergraduate Research Colloquium, ASU.
- Feb 2014 **Sweazea KL***. “Using Comparative Physiology Approaches to Identify Novel Mechanisms of Coping with High Blood Sugar,” Biological Design Proseminar, ASU.
- Nov 2013 **Sweazea KL***. “A Comparison of Oxidative Stress-induced Endothelial Dysfunction in Rats and Birds,” Midwestern University, Glendale, AZ.
- Nov 2013 **Sweazea KL***. “Understanding Aging through Comparative Physiology,” The Imagination Project, Center for Science and the Imagination, ASU.
- Nov 2013 **Sweazea KL***. “Downregulation of the Vascular Insulin Signaling Pathway May Contribute to Hyperglycemia Following High Fat Intake,” Arizona Physiological Society Conference, Phoenix, Arizona.
- Oct 2013 **Sweazea KL***. “Models of Oxidative Stress-induced Endothelial Dysfunction,” Integrative Physiology and Metabolism in Health and Disease Seminar Series, Center for Metabolic and Vascular Biology, School of Life Sciences, ASU & HEALth Program, Mayo Clinic, Arizona.
- Sept 2012 **Sweazea KL***. “Oxidative Stress-mediated Vascular Dysfunction in Rats and Birds,” School of Nutrition and Health Promotion, ASU.
- March 2012 **Sweazea KL***. “Oxidative Stress-mediated Vascular Dysfunction,” College of Medicine Phoenix, Department of Basic Medical Sciences Seminar, The University of Arizona.
- Feb 2012 **Sweazea KL***. Seminar on diabetes and health for the American Hellenic Educational Progressive Association (AHEPA), Chandler, AZ.
- May 2009 **Sweazea KL***. “Substrate Utilization by Birds and the Role of Oxidative Stress and Adipokines in Vascular Reactivity,” School of Life Sciences, ASU Tempe.
- April 2009 **Sweazea KL***. “Diet-Induced Vascular Dysfunction,” Department of Kinesiology, ASU Tempe.
- October 2008 **Sweazea KL***. “Birds Are Not Just Rats with Wings: A Comparison of Substrate Utilization,” Idea Networks of Biomedical Research Excellence Seminar, New Mexico Tech, Socorro, NM.
- Fall 2004 **Sweazea KL***. “Avian Diabetes,” University of Arizona, Desert Botanical Gardens, Physiology presentation, Tucson, AZ.

CHAired CONFERENCE SYMPOSIA

International

- 2023 Co-Chair, Nothing to Stress About: Endocrine and Oxidative Responses to Diet, North American Society of Comparative Endocrinology (NASCE) 7th biennial conference, Queretero, Mexico.

- 2022 Co-Chair, Uniqueness of Avian Glucose Regulation and Tolerance, International Symposium on Avian Endocrinology (ISAE) conference, Edinburgh, Scotland. (Cancelled participation due to Covid restrictions)
- 2021 Co-Chair, Avian Endocrine and Metabolic Responses to Urbanization, North American Society of Comparative Endocrinology (NASCE) 6th biennial conference, Virtual due to Covid-19.

National

- 2016 Co-Chair, Women in Physiology Seminar, “Negotiation for Success!” Experimental Biology conference, San Diego, CA.
- 2016 Co-Chair, Featured Topics Session, CEP Section of the APS, “Avian osmoregulation: Unique solutions, unanswered questions,” Experimental Biology conference, San Diego, CA.
- 2014 Co-Chair, “The Challenge of Teaching Physiology in a Changing Environment: Innovation and Resources,” 2014 APS Intersociety Meeting: Comparative Approaches to Grand Challenges in Physiology, San Diego, CA.
- 2010 Chair, Featured Topics Session, Comparative and Evolutionary Physiology (CEP) Section of the APS, “Comparative Metabolic Physiology,” Experimental Biology Conference, Anaheim, CA.
- 2007 Co-Chair, Featured Topics Session, CEP Section of The APS, “The Impact of Glucose and Fatty Acids on Insulin Resistance Across Species,” Experimental Biology Conference, Washington DC.

Local/State

- 2023 Co-Chair, *Cardiovascular Health and Beyond* Symposium, Arizona Physiological Society Conference, Glendale, AZ
- 2017 Chair, Comparative Physiology Session, Arizona Physiological Society Conference, Flagstaff, AZ
- 2015 Chair, Science Panel, Jumpstarting STEM Careers conference, Central Arizona chapter of the Association for Women in Science, Tempe, AZ (Jan 15)
- 2011 Session Co-Organizer, “Teaching Strategies,” Forward to Professorship Workshop, Arizona State University, Tempe, AZ.

FUNDED RESEARCH

Ongoing Research Support

National Science Foundation Childers (PI) 3/1/23-2/28/29
 LTER CAP V: Investigating how relationships between urban ecological infrastructure and human-environment interactions shape the structure and function of urban ecosystems
 The objectives of this center grant are to 1) answer new questions requiring long-term perspectives; 2) develop models and scenarios to address research questions; 3) apply existing urban ecological theory while contributing new theory; 4) promote and strengthen environmental justice and equity; 5) build and use transdisciplinary partnerships to foster resilience and enhance sustainability in urban ecosystems; and 6) adaptively manage our research and how we frame out with communities of practice.
 Role: Senior/Key Personnel (3% REC, 4% RID, 1% IIA)

Isagenix International Sweazea (PI) 2024-2025
Case Study: Examination of a whole food diet (Heart Healthy) compared to a hypocaloric, intermittent fasting, meal-replacement based diet on gut microbiome composition and circulating endotoxin in obese/overweight individuals.
This is a secondary analysis of samples from a subject who exhibited extraordinary weight loss during the initial trial.
Role: PI (Co-PIs: Alex Mohr and Corrie Whisner, CHS, ASU; Original Study PI: Paul Arciero, Skidmore College)

Completed Research Support (in order of initial award date)

CAP-LTER V Sweazea (PI) Summer 2024
The objectives of this summer project were to analyze the effects of urban diets and waste on the nutritional physiology of mealworms as a model prey organism.
Role: PI

Isagenix International Sweazea (PI) 03/01/20-5/31/23
Examination of a whole food diet (Heart Healthy) compared to a hypocaloric, intermittent fasting, meal-replacement based diet on gut microbiome composition and circulating endotoxin in obese/overweight individuals
This was a secondary analysis of samples provided from a weight loss study conducted at Skidmore College in the laboratory of Dr. Paul Arciero.
Role: PI

SOLS Research Investment Initiative Deviche (PI) 05/19/20-05/20/21
Faculty New and Bold Proposals: Urban air pollution and the pulmonary avian microbiome
Role: Co-PI

Isagenix International Sweazea (PI) 01/10/19-3/31/20
Exploration of a novel organometallic complex to restore gut health in rats consuming an obesogenic diet
The objective is to characterize the gut microbiome of young male Sprague-Dawley rats fed a high fat or control diet that were treated with 10-week OMC supplementation or vehicle. Samples are readily available for this study from the prior funded project.
Role: PI

CAP LTER IV (NSF) Sweazea (PI) 5/20/19-8/21/19
Evaluating the effects of urbanization on avian health and abundance near anthropogenic food sources
The objectives are to 1) assess the relationship between land use and cover types with the morphology and nutritional physiology of wild quail and 2) determine whether avian abundance and diversity are related to anthropogenic food sources in the Phoenix Metropolitan area.
Role: PI

SOLS/OKED Research Investment Initiative Sweazea (Co-PI) Spring 2018
Birds as experimental models to study diet-related metabolic and vascular system disorders

The objective is to generate preliminary data for larger grant applications.
PI: Pierre Deviche, SOLS, ASU

Isagenix International Sweazea (PI) 1/9/17-5/31/18
Exploration of the metabolic and vascular protective effects of an organometallic complex (OMC)
The objective is to evaluate the efficacy of 10-week supplementation with OMC at reversing metabolic and cardiovascular complications (weight gain, adiposity, inflammation, glucose regulation, endothelium-dependent vasodilation, and blood pressure) associated with high fat-high calorie intake in adult male Sprague-Dawley rats.
Role: PI

Isagenix International Sweazea (PI) 12/9/16-10/9/19
Reversing Metabolic and Cardiovascular Complications
The objective is to evaluate the efficacy of 10-week supplementation with OMC at reversing metabolic and cardiovascular complications (weight gain, adiposity, inflammation, glucose regulation, endothelium-dependent vasodilation, and blood pressure) associated with high fat-high calorie intake in adult male Sprague-Dawley rats.
Role: PI

Mayo Clinic Angadi (PI) 2015-2016
Department of Medicine Extramural Chair Award
Aerobic interval exercise preconditioning to prevent cardiometabolic and neuropsychological complications of anthracycline-based breast cancer chemotherapy
The goal was to determine, for the first time, the extent to which exercise *preconditioning* preserves cardiovascular performance, physical function, and quality of life in breast cancer patients undergoing anthracycline-based treatment.
Role: Co-I (PI: Siddhartha Angadi, EXW program, ASU)

Isagenix International Sweazea (PI) 10/1/15-8/31/16
Evaluation of the protective effects of a beet juice energy drink on vascular health
The goal was to examine the vasoactive properties of a beet juice energy drink rich in nitrates in healthy subjects.
Role: PI (Co-PI: Carol Johnston, Nutrition, ASU)

AmeriFlax Council Sweazea (PI) 1/1/14-6/30/15
Potential therapeutic benefits of flaxseeds in the treatment of type 2 diabetes symptoms
The goal was to measure the effectiveness of flaxseeds at reversing oxidative stress and inflammatory markers in subjects with type 2 diabetes.
Role: PI

Isagenix International Sweazea (PI) 8/1/13-11/30/14
Evaluation of the Anti-aging Properties of Product B
The objective was to measure the efficacy of a natural supplement at reducing markers of oxidative stress in healthy subjects.
Role: PI (Co-PI: Carol Johnston, Nutrition, ASU)

USDA Sweazea (PI) 7/1/12-12/31/13
 Almond Board of California, National Institute of Food and Agriculture
 Almond Ingestion to Reduce Hemoglobin A1C in Individuals with Type 2 Diabetes
 The goal was to measure the efficacy of almonds at reversing oxidative stress and inflammatory markers in subjects with poorly controlled type 2 diabetes.
 Role: PI (Co-PI: Carol Johnston, Nutrition, ASU)

ASU Foundation Sweazea (PI) 2011-2012
 Private Donor
 A Non-genetic Rat Model of Type 2 Diabetes: The HFD/STZ Model
 The objective was to develop a model of diet-induced type 2 diabetes exacerbated with streptozotocin-mediated ablation of pancreatic beta-cells.
 Role: PI

American Ornithologists' Union Sweazea (PI) 2011
 Putative Role of Glucose as a Cryoprotective Adaptation in Birds
 The goal was to measure correlations between glucose concentrations and variations in temperature as well as altitude in two species of passerine birds.
 Role: Lead PI (Co-PI: Krystal Tsosie, Master's student, Bioethics, ASU)

UNM School of Medicine Sweazea (PI) 2/1/07-6/30/07
 Cardiovascular and Metabolic Diseases Program
 Effects of Obesity on Vascular Function in a Model of Sleep Apnea
 The goal was to discern the disparate effects of high fat intake and eucapnic intermittent hypoxia on impaired endothelium-dependent vasodilation in young male Sprague-Dawley rats.
 Role: PI

TEACHING

Curriculum Development

2023 NTR 598 Research Methods for Translational Science, CHS
 2021 NTR 791 Topic: Nutrition and Wellness, CHS
 EXW/NTR 691 Topic: Physical Activity and Nutrition Graduate Seminar
 2019 NTR 524 Chronic Inflammation in the Metabolic Syndrome, CHS
 BIO 591 Topic: Comparative Nutritional Physiology, SOLS
 EXW/NTR 784 Teaching Internship, CHS
 2016 NTR/EXW 691 Physical Activity and Nutrition Graduate Seminar,
 "Professional Development Skills"
 2015 NTR 532/PUBH 6900 Pathophysiology and Nutrition, ASU; cross-listed
 with School of Public Health, University of Minnesota
 NTR/EXW 691 Physical Activity and Nutrition Graduate Seminar,
 "Development of your research agenda"
 2010 HSC 420 Evaluation of Health Sciences Research: hybrid version, SNHP
 HSC 320 Applied Medical/Health Care Ethics: Online version, SNHP
 2010 NTR 394 Applied Medical/Health Care Ethics, In-person course, SNHP

2008 BIO 202 Human Anatomy and Physiology II: developed lab and lecture, ABS

Lecture and Laboratory Courses Taught – Arizona State University

College of Health Solutions (formerly School of Nutrition and Health Promotion)

CHS 100 Optimizing Health and Performance, 3 times (2019-2022)
CHS 101 The ASU Experience, 1 time (2016)
HCD 400 Interpreting Scientific Literature, 7 times (2019-2024)
HSC 320 Applied Medical/Health Care Ethics, 14 times (2010-2016)
HSC 420 Evaluation of Health Science Research, 19 times (2010-2017)
MED 450 Leadership and Professionalism, 1 time (2024)
NTR 100 Introduction to Nutrition Science, 1 time (2021)
NTR 290 Evidence-based Nutrition, 5 times (2017-2018)
NTR 524 Chronic Inflammation in the Metabolic Syndrome, 13 times (2019-2024)
NTR 532 Pathophysiology and Nutrition, 2 times (-2017)
NTR/EXW 691 Topic: Graduate Professional Development Seminar, 3 times (2015-2021)
NTR/EXW 784 Teaching Internship, 5 times (2019-2023)
NTR/EXW 791 Graduate Professional Development Seminar, 2 times (2021-2022)

Applied Biological Sciences

BIO 202 Human Anatomy and Physiology II Lecture, 3 times (2008-2010)
BIO 202 Human Anatomy and Physiology II Laboratory, 2 times (2008)

School of Life Sciences

BIO 360 Animal Physiology, 9 times (2015-2023)
BIO 361 Animal Physiology Laboratory, 1 time (2021)
BIO 591 Topic: Comparative Nutritional Physiology seminar (2019)

Individualized Instruction – Arizona State University

College of Health Solutions (formerly School of Nutrition and Health Promotion)

CHS 492 Honors Directed Study, 1 student (2020)
CHS 493 Honors Thesis, 1 student (2021)
CHS 494 Nutrition Capstone, 2 students (2023-2024)
HSC 492 Honors Directed Study, 2 students (2009)
HSC 493 Honors Thesis, 1 student (2009)
HSC 494 Undergraduate Research Seminar, 9 students, (2010-2015)
HSC 489 Undergraduate Research, 4 students (2009-2010)
HSC 499 Undergraduate Research, 7 students (2009-2010)
NTR 493 Honors Thesis, 1 student (2018)
NTR 599 MS Thesis, 1 student (2023)
NTR 690 Reading and Conference, 1 time (2023)
NTR 780 Research Practicum, 1 student (2021)
NTR/EXW 791 Graduate Professional Development Seminar, 2 times (2021-2022)
NTR 792 Doctoral Research, 1 student (2019)
NTR 799 Dissertation Research, 2 students (2021-2022)

Barrett, The Honors College

HON 498 Honors Research, 3 students (2014)

Biochemistry

BCH 392 Introduction to Research Techniques, 2 students (2017)

BCH 492 Honors Directed Study, 1 student (2014)

BCH 493 Biochemistry Honor's Thesis, 1 student (2014)

Biodesign

BDE 792 Biodesign Graduate Research, 1 student (2016)

Molecular Biosciences and Biotechnology

MBB 495 Independent Undergraduate Research, 2 students (2023-2024)

School of Life Sciences

BIO 492 Honors Directed Study, 12 students (2014-2022)

BIO 493 Undergraduate Honors Thesis, 16 students (2014-2023)

BIO 495 Undergraduate Research, 31 students (2012-2023)

Guest Lectures

Oct 24, 2024 "High Nitrate Foods and Cardiovascular Health", Mayo Clinic Selective Guest Lecture, ASU, Downtown Phoenix campus

Fall 2023 CHS 691, Early Career Professional Development, *Guest Lecture on Mentoring*

Spring 2018 & 2019 NTR/EXW 791, Guest Lecture on *Mentoring*, CHS

Spring 2018 EVO 610 Research Areas of Evolution, Guest Lecture on *Comparative Physiology*, School of Life Sciences (SOLS)

Fall 2016 EVO 610 Research Areas of Evolution, Guest Lecture, School of Life Sciences (SOLS)

BCH 462 General Biochemistry, Guest lecture on *Diet-induced Vascular Dysfunction*, ASU

Spring 2016 Developed a Lecture on Comparative Physiology for Henry Stewart Talks for international distribution

NTR 340 Guest speaker on research, Evidence-Based Nutrition, Nutrition, ASU

BIOL 110 Guest Lecture for *Contemporary Problems in Biology*, New Mexico State University, Grants, NM

Spring 2015 NTR/EXW 791, Doctoral Seminar, Guest Lecture: *Time Management: The 24/7 Professor*, School of Nutrition and Health Promotion (SNHP)

Spring 2014 EVO 610 Research Areas of Evolution, Guest Lecture, School of Life Sciences (SOLS)

NTR/EXW 791, Doctoral Seminar, Guest Lecture: *Women in Science*, School of Nutrition and Health Promotion (SNHP)

University of New Mexico

Fall 2007 Problem Based Learning Facilitator, Medical School Phase I, Human Sexuality, Reproduction/Endocrinology Block, UNM

Guest Lecture, Physiology I, New Mexico Tech, Socorro, NM

Fall 2006 Guest Lecture, Physiology I, New Mexico Tech, Socorro, NM

University of Arizona, Tucson

Spring 2005 Teaching Assistant, PSIO 601/801, Renal Lab for Medical and Physiology Graduate Students, University of Arizona, Tucson

Spring 2004 Head Teaching Assistant, PSIO 601/801, Renal Lab, University of Arizona, Tucson

Spring 2003 Head Teaching Assistant, PSIO 601/801, Renal Lab, University of Arizona, Tucson
Teaching Assistant, PSIO 601/801, ECG Lab for Medical and Physiology Graduate Students, University of Arizona, Tucson

Spring 2002 Teaching Assistant, PSIO 601/801, Renal Lab for Medical and Physiology Graduate Students, University of Arizona, Tucson
Teaching Assistant, PSIO 480: Cellular, Neural and Endocrine Physiology, University of Arizona, Tucson

2001 Student Coordinator, The University of Arizona Learning Center, Tucson
Course Coordinator, Physiological Sciences Student Forum, University of Arizona, Tucson

FACULTY MENTORING

2021-2022 Dr. Andrea Pittmann, Associate Professor of Speech and Hearing Science, CHS

2019-2021 Dr. Yi Zhou, Assistant Professor of Speech and Hearing Science, CHS – promoted to Associate Professor with tenure in 2020

2020 Sponsor to Dr. Dagmara Hering, MD, PhD, visiting scholar from Medical University of Gdansk-Poland, Department Hypertension and Diabetology, First Department of Cardiology

MENTORING

Postdoctoral Fellow Mentoring Since Employment at ASU

Role/Defense Date	Student/Field	Research Topic	<i>Special Achievements and Mentored Grants for Research in My Laboratory</i>
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CURRENT

Co-Mentor 1/22-pres	<i>Adi Domer</i> UC Berkeley	Glucose regulation in nectarivorous birds (<i>Co-mentor</i> : Dr. Robert Dudley, UC Berkeley)	2022-2025 Postdoctoral Fellowship, International Human Frontier Science Program Organization (top 13% of applicants)
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Graduate Thesis/Dissertation Committees Since Employment at ASU

Role/Defense Date	Student/Field	Research Topic	Special Achievements and Mentored Grants for Research in My Laboratory
<u>CURRENT</u>			
Chair 08/23-present	Maggie Symes , MS Nutritional Sciences, CHS, ASU <i>Co-authored publication</i> #68	<i>Thesis:</i> Role of Myo-inositol in avian blood glucose regulation	2023 Jumpstart Grant, (\$750)
Mentor 09/23-present	Krishna Sapariya , MS Nutrition Sciences, CHS, ASU	<i>Thesis:</i> Cardioprotective role of genistein and exercise in the aorta of high fat diet fed mice	
Member 4/23-present	Kinta Schott , PhD, Exercise and Nutritional Sciences, CHS, ASU	<i>Mentor:</i> Floris Wardenaar, CHS, ASU	
Member 4/23-present	Emily (Oliver) Dow , PhD, Exercise and Nutritional Sciences, CHS, ASU	<i>Dissertation:</i> The effects of a 12-week resistance exercise program on biomarkers of intestinal permeability, cognition, and mood state in healthy adults <i>Mentor:</i> Carol Johnston, CHS, ASU	
Mentor 11/22-present	Milena Figueiredo de Sousa , PhD, Food Science and Technology, Federal University of Goias, Brazil <i>Co-authored publication</i> #68	<i>Dissertation:</i> Effect of consumption of a fiber formulation on morphology, lipids, glucose, and gastrointestinal hormones in adolescent male Sprague-Dawley rats <i>Independent Study:</i> Acute effects of metformin on plasma glucose regulation in mourning doves	2024 2 nd place for research presentation at the 1 st Midwest Production Congress Innovation and Food Safety (CPISA), Federal University of Goiás, Brazil. 2022-2023 Capes Scholarship, Brazil for 10 month research internship in my lab
Chair 9/22-present	Jingyu Ling , MS Nutrition, CHS, ASU	<i>Thesis:</i> Evaluation of a novel fiber complex for the prevention of high fat diet induced metabolic syndrome.	2023 GPSA Terminal Graduate Research and Support Program Grant, ASU (\$2000)
Member 4/22-present	Leanna Watts MS Biology, SOLS, ASU	<i>Thesis:</i> TBD <i>Mentor:</i> Pierre Deviche, SOLS	
Chair 1/22-present	Rory Lockett MS Biology, SOLS, ASU	<i>Thesis:</i> Impact of urban stressors on the nutritional physiology of mealworms	2024 Novo Nordisk Travel Award to present research at APS Summit 2023 Jumpstart Grant, GPSA, ASU (\$750)
Member 2/22-present	Mollie Peters PhD Evolutionary Biology, ASU	<i>Dissertation:</i> <i>Mentor:</i> Ken Buetow, Evolutionary Biology	

Member 08/19-pres	<i>Sarah Polekoff</i> PhD, Biology, ASU	<i>Dissertation:</i> Effects of urban living on oxidative stress and behavior in house finches (<i>Haemorrhous mexicanus</i>) <i>Mentor:</i> Pierre Deviche, SOLS, ASU
Member 8/17-2018	<i>Karen Moreno</i> PhD, ENS program, ASU	<i>Dissertation:</i> Improving physical activity adherence and disease risk for obese, middle-aged women <i>Mentor:</i> Pamela Swan, ENS program
Member 2021-pres	<i>Samantha Fessler</i> PhD, ENS, ASU <i>Co-authored publication #59</i>	<i>Dissertation:</i> Combined effects of maqui berry extract and omega-3 fatty acids on circulating markers of inflammation and cardiometabolic risk in adults with type 2 diabetes <i>Mentor:</i> Carol Johnston, CHS, ASU

PAST

Member 11/20-09/23	<i>Daniel Jackson</i> PhD, Biology, ASU	<i>Dissertation:</i> Urban evolution in Arizona cardinals <i>Mentor:</i> Kevin McGraw, SOLS, ASU
Chair 09/21-04/14/23	<i>Adam Liang</i> MS Nutrition Sciences, CHS, ASU	<i>Thesis:</i> Evolutionary mismatch education to improve diet of veterans
Member 09/21-03/23	<i>Allyson Deimeke</i> MS Nutrition, CHS, ASU	<i>Thesis:</i> The cognitive effects of maqui berry extract and fish oil in adults with type 2 diabetes <i>Mentor:</i> Carol Johnston, CHS, ASU
Member 2/18-02/24/2023	<i>Bukola Obayomi</i> PhD, Biology, ASU	<i>Dissertation:</i> Investigating tyramine's role in the mouse uterine horn <i>Mentor:</i> Debra (Page) Baluch, SOLS, ASU
Member 3/20-10/28/2022	<i>Jennifer Hesterman</i> PhD, Neuroscience, ASU	<i>Dissertation:</i> Detecting autoantibodies as biomarkers of Type 1 diabetes <i>Mentor:</i> Joshua LaBaer, Biodesign, ASU
Mentor 09/21-12/22	<i>Tara Hill</i> MS Nutrition Sciences, CHS, ASU	<i>Thesis:</i> The effects of an evolutionary mismatch narrative, during nutrition education, on ultra-processed food intake, anthropometrics, lipid profile and blood pressure
Chair 08/18-11/22	<i>Alex Mohr</i> PhD, ENS, ASU <i>Co-authored Publications #39, 44, 45, 50, 51, 53, 56, 58, 59, 63, 65, 67</i>	<i>Dissertation:</i> Resiliency and individuality influence the trajectory of gut microbiome through nutritional, feeding, and lifestyle behavior pressures <i>Co-Mentoring undergrad students in the lab:</i>

*2022 College of Health Solutions Outstanding University Graduate, ASU
2022 Graduate Research Support Program Award (\$2000)*

4Carissa McEvoy, Biology, Barrett
(grad 2021) – third committee
member
Vivian DoleVy, Biology, SOLUR

*2021 Evidence Analysis
Library Summer Research
Fellowship, Academy of
Nutrition and Dietetics
Foundation
2020 GPSA Athletics
Research Grant (\$3482)
2020 Graduate Research
Support Program Award
(\$2000)
Fall 2019- Spring 2020
ENS Block Grant
2019 Dr. Dolittle Travel
Award, Comparative and
Evolutionary Physiology
section of the APS
2019 Graduate and
Professional Student
Association Travel Grant
2019 Graduate Research
Support Program Award
(\$2000)
2022 Outstanding Mentor
Award, Graduate and
Professional Student
Association, ASU
2022 The College
Graduate Excellence
Award, ASU
2022 JEDI Award,
Graduate and Professional
Student Association, ASU
2021-2022 Dr. Elizabeth
Capaldi Phillips Memorial
Award for Graduate
Research in the
Psychology of Eating,
Psychology Department,
ASU
2021-2022 SOLS
Graduate Completion
Fellowship, SOLS, ASU
Summer 2021 Inclusive
Teaching Fellowship,
SOLS, ASU
2021 Research
Recognition Award,
Comparative and
Evolutionary Physiology
Section, American
Physiological Society*

Chair
8/17-4/13/22

Anthony Basile
PhD, Evolutionary
Biology, SOLS
*Co-authored
Publications #44, 45,
48, 51, 52, 54, 55, 62,
63, 64, 68
Initial position after
graduation:
Adjunct Faculty, CHS,
ASU (2022-2023)
Current position:
Assistant Professor,
SUNY Oneonta*

*Dissertation: Diabetes, Diet, and
Doves: Birds as a negative model for
hyperglycemic complications
Other projects:
-Evolutionary mismatch narrative to
promote health in obese adults
-Low carbohydrate vs low fat diets
for weight loss
-Evolutionary mismatch education to
improve diet and health of veterans
Co-Mentored MS student:
Steven Stanley, Medical Nutrition
(2020-2021)
Co-Mentoring Medical student:
Deb Watson (Spring-Fall 2021)
Co-Mentoring Barrett students in the
lab as third committee member:
Avin Kreisler (2021-2022)
Michael Renner (grad 2020)
Lana Kayata (grad 2020)
Lorne Lambries (grad 2020)
Co-Mentoring SOLUR students:
Kavita Singh (2020-2022)
Ellinor Hjelm (2020-2021)
Co-Mentoring LEAP Scholar:
Nereus Noshirwani (2021-2022)
Other undergraduate co-mentoring:
Sarah Mathias (fall 2020)
Angel Morales (2020-2021)*

2021 Graduate College
 Q4 Online/Remote Travel
 Awards for Experimental
 Biology conference &
 Nutrition Live ASN
 conference
 2020-2021 Graduate
 Excellence Scholarship,
 The College of Liberal
 Arts and Sciences
 2020 Finalist: Emerging
 Leader in Nutrition
 Science, ASN Conference
 2019 CAP LTER Grant,
 ASU (\$2565)
 2019-2020 Graduate
 College Fellowship, ASU
 2019 Novo Nordisk
 Foundation Travel Grant
 from the CEPS Section of
 the APS
 2018-2019 The College,
 Graduate Excellence
 Award
 2019 Graduate and
 Professional Student
 Association Travel Grant
 2018 Novo Nordisk
 Foundation Travel Grant
 from the CEPS Section of
 the APS to attend EB
 2018 SOLS Travel Award
 2018 GPSA Graduate
 Research Support
 Program Award (\$1953)

Member 11/20-03/22	Ciara Lundy MS, Nutritional Science, ASU	<i>Thesis:</i> Relationships between erythrocyte osmotic fragility and vitamin C nutriture in adults with or without type 2 diabetes <i>Mentor:</i> Carol Johnston, CHS, ASU
Member 10/19- 2/22/22	Eric Bartholomae PhD, ENS, ASU	<i>Dissertation:</i> Nitrogen balance and protein intake at the RDA in underactive male vegans <i>Mentor:</i> Carol Johnston, CHS, ASU
Member 01/21- 3/21/22	Paniz Jasbi PhD, ENS, ASU <i>Co-authored</i> <i>publications #48, 51, 59,</i> <i>65</i>	<i>Dissertation:</i> Mass spectrometry- based metabolomics: Considerations for laboratory testing <i>Mentor:</i> Carol Johnston, CHS, ASU

Mentor 07/20-05/21	Steven Stanley MS, Medical Nutrition, ASU Current position: Medical Student	<i>Applied Project:</i> The effect of food processing on total antioxidant content.
Member 8/15-5/20/21	Pierce Hutton PhD, Biology, SOLS, ASU <i>Co-authored publication: #47</i>	<i>Dissertation:</i> The ‘beauty sleep’ hypothesis: Plumage ornaments as sexually selected indicators of sleep phenotype. <i>Mentor:</i> Kevin McGraw, SOLS, ASU
Member 3/18-6/24/21	Emily Webb PhD, Biology, ASU	<i>Dissertation:</i> Where have the carotenoids gone? Physiology of carotenoid absorption and distribution in birds <i>Mentor:</i> Kevin McGraw, SOLS
Member 7/20-4/12/21	Hunter Kleinschmidt MS, Biology, ASU	<i>Thesis:</i> The influence of dietary food moisture on hydration status in adults <i>Mentor:</i> Stavros Kavouras, CHS, ASU
Member 4/16-4/14/21	Latoya Campbell PhD, SOLS CMVB	<i>Dissertation:</i> Apolipoprotein A6 function in adipose tissue <i>Mentor:</i> Jin Liu, CVMB at Mayo
Member 4/19-4/8/21	Shelbi Peck PhD, Biology, ASU	<i>Dissertation:</i> The pursuit of parenthood: Expanding horizons of reproductive physiology and assisted reproductive technologies <i>Mentor:</i> Page Baluch, SOLS, ASU
Member 1/19-04/21	Bethany Weigand MS, Nutrition, ASU	<i>Thesis:</i> Exploring the association of dietary sugars and advanced glycation end products <i>Mentor:</i> Natasha Tasevska, CHS, ASU
Member 9/19-11/4/20	Jeffrey Patterson MS, Nutrition	<i>Thesis:</i> Integrative metabolomics reveals the effects of nitrate-rich diets on vascular function: A secondary data analysis. <i>Mentor:</i> Haiwei Gu, CHS, ASU
Member 1/18-05/20	Selicia Mayra PhD, ENS, ASU <i>Co-authored publications: #41, 45 Initial Position after graduation: Assistant Professor, Department of Nutrition and Health Science, Ball State University, Muncie, IN</i>	<i>Dissertation:</i> High-nitrate salad increased plasma nitrates/nitrites and brachial artery flow-mediated dilation in postmenopausal women: a controlled feasibility study <i>Mentor:</i> Carol Johnston, College of Health Solutions (CHS)

Chair 08/18-4/1/20	<i>Morgan Nelson</i> MS, Biology, ASU	<i>Thesis:</i> Evaluation of an organometallic complex on the development of cardiovascular disease risk following a 10-week high-fat diet	<i>2019-2020 Graduate College Fellowship, ASU</i> <i>2019 Graduate Research Support Program Award (\$1500)</i> <i>2019 Graduate and Professional Student Association Travel Grant for EB 2019</i> <i>2018 Jumpstart Research Grant, GPSA, ASU (\$500)</i>
Member 1/18-4/2/19	<i>Katy Argo</i> MS Nutrition Program, ASU	<i>Thesis:</i> Gut microbiome diversity and community structure following dietary genistein treatment in a murine model of cystic fibrosis. <i>Mentor:</i> Corrie Whisner, Nutrition, ASU	
Chair 3/15-4/1/19	<i>Meli'sa Crawford,</i> PhD, Biology, SOLS, ASU <i>Co-authored Publications #40, 42, 43, 44, 50, 59</i> <i>Initial position after graduation:</i> <i>Postdoctoral Fellow with Dr. Declan McCole at UC-Riverside</i>	<i>Dissertation:</i> Examining the effects of a high fat diet on the development of metabolic syndrome and gut leakiness in male Sprague-Dawley rats	<i>2019 Martin Frank Minority Travel Award, American Physiological Society</i> <i>2018 Caroline tum Suden/Frances Hellebrandt abstract-based award, American Physiological Society</i> <i>2018 GPSA Graduate Research Support Program Award (\$2000)</i> <i>2017 3rd place poster presentation at the Arizona Physiological Society conference</i> <i>2017-2018 ASU Graduate College Fellowship</i> <i>2017-2019 Initiative for Maximizing Student Development (IMSD) Fellowship, ASU</i> <i>2016 GPSA Jumpstart grant, ASU (\$500)</i> <i>2016 Sigma Xi Grant-in-Aid of Research award (\$5000)</i> <i>2016 GPSA Travel Grant, ASU</i> <i>2016 Minority Travel Fellowship, American Physiological Society</i> <i>2014-2016 NSF Bridge to the Doctorate Fellowship</i>

Member 12/17- 2/27/19	Noel Ugarte MS, Nutrition Program, ASU	<i>Thesis:</i> Assessing the relationship between cobalamin deficiency and methylation capacity in a vegetarian population <i>Mentor:</i> Carol Johnston, Nutrition, ASU	
Chair 8/17-1/19	Kelly McCormick MS, Nutrition Program, ASU	<i>Thesis:</i> Will a novel organometallic complex mitigate the effects of hypertension in rats fed a high fat diet?	
Member 5/18-12/18	Lakshmi Madhavpeddi PhD, Clinical Translational Sciences, UofA COM Phoenix	<i>Dissertation:</i> The role of prenatal stress in contributing to later cardiovascular disease <i>Mentor:</i> Taben Hale, UofA COM Phoenix	
Chair 8/16-7/11/18	Julia Barberes MS, Nutrition Program, ASU <i>Initial position after graduation: Inpatient Dietitian, Mayo Clinic Hospital, Scottsdale AZ</i>	<i>Thesis:</i> The effects of sumac on saturated fat-induced inflammation in human vascular smooth muscle cells and isolated mesenteric arteries from rats	
Member 5/15-7/5/18	Shelley Valle PhD, Biology, SOLS	<i>Dissertation:</i> Consequences of negative energy balance on avian reproductive physiology: Endocrine and Metabolic Mediators <i>Mentor:</i> Pierre Deviche, SOLS	
Member 1/15-5/24/18	Jacob Campbell PhD, SOLS	<i>Dissertation:</i> Physiological and genetic mechanisms underlying variation in anoxia tolerance in <i>Drosophila melanogaster</i> . <i>Mentor:</i> Jon Harrison, SOLS	
Chair 8/17-4/9/18	Deb Watson MS, Nutrition Program, ASU <i>Co-authored publication #62</i> <i>Initial position after graduation: Medical Student (graduated 2021 Universidad Autonoma de Guadalajara, Mexico)</i>	<i>Thesis:</i> Oxidative stress and a high fat diet in rats: An intervention study on the effects of an organometallic compound on enzyme function, inflammatory markers, endotoxins, and fasting serum glucose and insulin levels	<i>2018 Spring GPSA Jumpstart Grant (\$500)</i>
Mentor 8/15-4/16/17	Farhan Aslam PhD, Dept Food Science and Human Nutrition, Univ. Veterinary and Animal Sciences, Lahore, Pakistan	<i>Dissertation:</i> Efficacy of a snack containing white sesame seed oil at improving glucose regulation in human subjects. <i>Co-mentor:</i> Pamela Swan, ESHP	

	<i>Co-authored Publications #33, 37 Initial position after graduation: Punjab Food Authority, Lahore, Pakistan</i>		
Chair 1/16-4/3/17	Selicia Mayra MS, Nutrition Program, ASU <i>Co-authored Publication #41, 45 Initial Position after graduation: Doctoral Student, ENS Program, CHS, ASU</i>	<i>Dissertation: Comparison of high- nitrate versus low-nitrate diets on cardiovascular health in post- menopausal women Co-mentor: Dr. Carol Johnston, Nutrition, ASU</i>	<i>2016 GPSA Jumpstart Grant, ASU (\$500)</i>
Member 8/15-3/15/17	Elizabeth Journey MS, Nutrition Program, ASU	<i>Thesis: Changes in weight status and the intestinal microbiota among college students. Mentor: Corrie Whisner, Nutrition, ASU</i>	
Chair 8/15- 08/12/16	Tana Ingram MS, RDN Nutrition Program, ASU <i>Co-authored Publication #35 Initial position after graduation: Registered Dietitian at Dignity Health, Wight Loss Center, Gilbert, AZ</i>	<i>Thesis: Evaluation of protein glycation and antioxidant levels in birds of prey</i>	<i>2015 Graduate Research Support Program Award, ASU (\$2000)</i>
Chair 8/15- 11/21/16	Emily Schwab MS, Nutrition Program, ASU <i>Co-authored Publication #36 Initial position after graduation: Clinical Dietitian with Maricopa Integrated Health System, Phoenix, AZ</i>	<i>Thesis: Pilot study: The synergistic effect of almond consumption and aerobic activity on the reduction of cardiovascular disease risk in sedentary adults</i>	<i>2015 Graduate Research Support Program Award, ASU (\$1783)</i>
Member 8/15-8/16	Elizabeth McElaney MS, Nutrition Program, ASU <i>Co-authored publication #36</i>	<i>Thesis: Almond consumption during a walking intervention in relation to heart rate recovery. Mentor: Carol Johnston, Nutrition, ASU</i>	
Chair 8/14-5/16	Jessica Zuck MS, RDN, Nutrition Program, ASU <i>Co-authored Publication #31, 35</i>	<i>Thesis: A comparison of the impact of temperature and glucose concentration on percent glycated serum albumin between chickens and humans</i>	<i>2015 Graduate Research Support Program Award, ASU (\$2000)</i>

	<i>Currently working as a Fresh Fruit and Vegetable Program Specialist with the Arizona Department of Education, Phoenix, AZ</i>		
Member 8/14-4/13/15	Kathryn Earhart (Bratrud) MS, Nutrition Program, ASU	<i>Thesis: Vitamin C and the Common Cold in the Asthmatic Population, Mentor: Carol Johnston, ASU</i>	
Member 2015	Kelly Cosgrove MS, Nutrition, ASU	<i>Thesis: The impact of adherence to a vegan diet on acid-base balance: A randomized controlled trial in healthy college students. Mentor: Carol Johnston, Nutrition, ASU</i>	
Member 2015	Jessica Knurick PhD, Physical Activity Nutrition and Wellness (PANW) Program, ASU <i>Co-authored publication #30</i>	<i>Dissertation: Effects of postmeal walking on postprandial glucose control and oxidative stress. Mentor: Carol Johnston, Nutrition, ASU</i>	
Chair 8/13-11/14	Catherine Crinigan MS, Nutrition Program, ASU <i>Co-authored Publication #24</i> <i>Initial position after graduation: Clinical Dietitian at Southern Arizona VA, Tucson, AZ</i>	<i>Thesis: Effects of a short-term high fat diet on kidney morphology and function</i>	<i>2014 Graduate Research Support Program Award, ASU (\$2000)</i> <i>2014 Sigma Xi Grant-in-Aid of Research, ASU (\$200)</i>
Member 2014	Lindsay Gnant (Stubbs) MS, Nutrition Program, ASU <i>Co-authored publication #45</i>	<i>Thesis: The effect of vitamin C supplementation on sICAM-1 in asthmatic study participants. Mentor: Carol Johnston, Nutrition, ASU</i>	
Member 11/10/14	Scott Davies PhD, Biology, ASU <i>Co-authored publication #17</i>	<i>Dissertation: Investigating the influence of food on reproductive physiology and gonad growth: Urbanization as a natural experiment. Mentor : Pierre Deviche, SOLS, ASU</i>	
Chair 8/11-5/15	Kristin Ricklefs-Johnson PhD, PANW Program ASU <i>Co-authored Publication #23, 32</i> <i>Initial position after graduation: Postdoctoral Fellow, Mayo Clinic, Arizona</i>	<i>Dissertation: Potential therapeutic benefits of flaxseeds in the treatment of type 2 diabetes; Other projects: High fat diet-induced alterations of vascular insulin signaling pathway; Effects of high fat diets on bone metabolism.</i>	<i>2015 Graduate Research Support Program Award (\$2000)</i> <i>2014 2nd place graduate student poster presentation, Arizona Physiological Society conference</i>

*Currently employed as
Director of Nutrition
Research, US Dairy
Council*

*2014-2015 Graduate
Education Dissertation
Fellowship, ASU
2014 Jumpstart
Research Award, ASU
(\$450)
2014 Graduate Research
Support Program
Award, ASU (\$450)
2013 AmeriFlax Council
Research grant (\$5000)
2013 JumpStart
Research Award, ASU
(\$500)
2012-2013 Graduate
Research Support
Program Award, ASU
(\$2000)*

Chair
1/13-4/14
Samer Alanbagy, MD
MS, Nutrition Program
ASU

*Thesis: The effects of omega-3
supplementation on markers of
obesity and endothelial function in
healthy subjects.*

Member
Spring 2014
Sarah Wherry
PhD, PANW, ASU

*Dissertation: Effectiveness of a Wii®
intervention on balance, muscular
fitness, and bone health in middle-
aged women.
Mentor: Pamela Swan, Exercise and
Wellness, ASU*

Member
Fall 2013
Giselle Pereira Pignotti
PhD, PANW Program,
ASU

*Dissertation: The efficacy of nopales
(Opuntia Spp) on lipoprotein profile
and oxidative stress among
moderately hypercholesterolemic
adults.
Mentor: Sonia Vega-Lopez,
Nutrition, ASU*

Chair
7/12-1/14
Katherine Petersen
MS, Nutrition Program
ASU
*Co-authored
Publication #23
Initial position after
graduation: Registered
Dietitian at Banner
Health, Phoenix, AZ*

*Thesis: The effects of almond
consumption in subjects with type 2
diabetes: Differences between men
and women.*

*2012-2013 Graduate
Research Support
Program Award, ASU
(\$2000)
2012 JumpStart Research
Award, ASU (\$500)*

Member
7/12-4/13
Elizabeth Sussman
PhD, PANW Program,
ASU

*Dissertation: Selenium
supplementation and cardiovascular
outcome markers in hemodialysis
patients: A randomized, controlled
trial.*

Member Spring 2013	Laurie Black PhD, PANW Program, ASU	<i>Mentor:</i> Carol Johnston, Nutrition, ASU <i>Dissertation:</i> Effects of a fat/sugar supplemented diet, with and without exercise training, on endothelial function, blood pressure, and markers of cardiovascular risk. <i>Mentor:</i> Glenn Gaesser, Exercise and Wellness, ASU	
Chair 8/10-5/12	Catherine Jarrett MS, Nutrition Program ASU <i>Co-authored</i> <i>Publication #19, 25, 29</i> <i>Initial position after</i> <i>graduation: Doctoral</i> <i>Student, ENS program,</i> <i>CHS, ASU</i> <i>Currently a postdoctoral</i> <i>fellow in the Department</i> <i>of Internal Medicine,</i> <i>University of Utah, Salt</i> <i>Lake City, UT</i>	<i>Thesis:</i> Characterization of acetylcholine-mediated vasodilation in mourning dove arteries under normoglycemic and hyperglycemic conditions	<i>2012 Novo Nordisk Travel</i> <i>Award, CEP Section, APS</i> <i>2010-2011 Graduate</i> <i>Research Support</i> <i>Program Award, ASU</i> <i>(\$2000)</i> <i>2010 Sigma Xi Grant-in-</i> <i>Aid of Research, ASU</i> <i>(\$200)</i>
Member Fall 2012	Emily Medved MS, PANW Program, ASU	<i>Thesis:</i> Effects of vinegar on colonic fermentation and glycemia. <i>Mentor:</i> Carol Johnston, Nutrition, ASU	
Member Spring 2012	Sarah Kuzmiak PhD, Kinesiology, ASU <i>Co-authored publication</i> <i>#15</i>	<i>Dissertation:</i> Mitochondrial physiology in avian and mammalian skeletal muscle. <i>Mentor:</i> Wayne Willis, Kinesiology/SOLS, ASU	
Research Mentor 1/11-7/12	Krystal Tsosie MS, Applied Ethics ASU <i>Co-authored publication</i> <i>#46</i>	<i>Thesis:</i> Non-thesis project: Seasonal regulation of glucose in birds. <i>This</i> <i>was a side-project for Krystal.</i>	
Member Summer 2011	Jennifer Vranish MS, Physiology, UA	<i>Thesis:</i> Isolation of putative osmoreceptor from avian GI tract. <i>Mentor:</i> Eldon Braun, Physiology, UA, Tucson	
Member Spring 2011	Kimberly Hostetter MS, Physiology, UA	<i>Thesis:</i> Glucose and insulin expression patterns in avian pancreata. <i>Mentor:</i> Eldon Braun, Physiology, UA, Tucson	
Member Spring 2010	H. Bobby Fokidis PhD, Biology, ASU	<i>Dissertation:</i> From the brain to the barrio: Energy and stress interact to	

	<i>Co-authored publications #13 & 16</i>	facilitate the urbanization of Sonoran Desert birds. <i>Mentor:</i> Pierre Deviche, School of Life Sciences, ASU
Member Spring 2010	Claire Anthony MS, Physiology, UA <i>Co-authored publication #49</i>	<i>Thesis:</i> Avian resistance to glycation. <i>Mentor:</i> Eldon Braun, Physiology, UA, Tucson

Undergraduate Trainees Since Employment at ASU

Role/Defense dates	Student/Field	Research Topic/Thesis Project	Special Achievements for Research in My Laboratory
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CURRENT

Chair 8/24-pres	Maddelyn Gibson Biological Sciences, ASU	<i>Honors Thesis:</i> Food choice in urban v rural birds in the Phoenix Metropolitan area.
Mentor Fall 2024	Clark Chee Nutrition, ASU	<i>Capstone:</i> Genistein v Exercise on the prevention of vascular disease in mice fed a high sucrose high fat diet.
Co-Chair 3/24-pres	Harlow Kelley Biology, ASU	<i>Honors Thesis:</i> TBD <i>Mentor:</i> Taben Hale, U Arizona, Phoenix
Mentor Fall 2023	Aleeza Feffer Kinesiology (NTR Minor), ASU	
Mentor 10/21-pres	Gabrielle (Gale) Larson Medical Microbiology, SOLS, ASU <i>Co-authored publication #68</i>	<i>Independent Study:</i> Acute effects of metformin on plasma glucose regulation in mourning doves
Member 10/19-pres	Basel Taha College of Health Solutions	<i>Honor's Thesis:</i> Effects of ketones from intermittent fasting <i>Mentor:</i> Carol Johnston, CHS
Member 9/19-pres	Braegen Fuentes CHS, ASU	<i>Honors Thesis:</i> Effect of Acute Bout of WBV+RE on Bone Turnover Markers <i>Mentor:</i> Pamela Swan, CHS, ASU

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Mentor 1/24-4/24	Oliver Wellington Nutrition, ASU	CHS 494: Capstone Learned how to stain and image tissue sections for microscopy
Member 08/23-8/6/24	Hrishita Sharma Nutrition, ASU	<i>Honors Thesis:</i> Mouthwash, nitric oxide, and blood pressure <i>Mentor:</i> Carol Johnston, CHS, ASU

Mentor 9/22-05/23	<i>Maggie Symes</i> Nutrition, Dietetics <i>Co-authored publication</i> #68	<i>Independent Study:</i> Acute effects of metformin on plasma glucose regulation in mourning doves	
Mentor Spring 2023	<i>Hudda Alkahedy</i> Nutrition	<i>CHS 494 Capstone research experience:</i> Involved with a study designed to examine the anti-diabetic effects of a novel fiber complex	
Chair 9/22-4/23	<i>Ryan Hassen</i> Biomedical Sciences, Certificate in Evolutionary Medicine <i>Co-authored publication</i> #68	<i>Thesis:</i> Acute effects of metformin on plasma glucose regulation in mourning doves	
Mentor 09/19-5/23	<i>Vivian DoleVy</i> Biomedical Sciences, ASU	<i>Independent Study:</i> Comparison of the efficacy of genistein and exercise at mitigating vascular changes induced by a high fat diet in mice. <i>SOLUR project:</i> Effects of in vitro exposure to high glucose on oxidative stress.	
Chair 12/20- 02/21/23	<i>Avin Kreisler</i> Biomedical Sciences with certificate in Evolutionary Medicine <i>Co-authored publication</i> #68	<i>Honor's Thesis:</i> The role of gluconeogenesis in the regulation of avian blood glucose concentration <i>Independent Project:</i> Super birds: The majority of avian blood metabolites are not altered by urban environments – Results from a systematic review	
Mentor 12/20-4/22	<i>Nereus Noshirwani</i> LEAP Scholar Biomedical Sciences, ASU	<i>LEAP Scholar Project:</i> Ultra-processed foods and fast food restaurants: A menu and ingredient analysis.	<i>2nd Place, 2022 SOLS Undergraduate Research Poster Symposium</i>
Mentor 10/20-4/22	<i>Kavita Singh</i> Biological Sciences <i>Co-authored publications</i> #62, 68	<i>SOLUR Research Project:</i> A systematic review of the effects of macronutrient manipulation on avian blood glucose concentration	<i>-2nd Place, Undergraduate Student Poster Presentation, Arizona Physiological Society conference, Glendale, AZ -Presented research at 2021 SOLS UG Research Symposium -2020-2021 SOLUR Student</i>

Mentor 12/20-12/21	Angel Morales Biological Sciences	<i>Independent Project:</i> Link between level of food processing and glycemic load	<i>3rd Place, Undergraduate Student Poster Presentation, 2021 Arizona Physiological Society Conference, Glendale, AZ</i>
Mentor 2/20-12/21	Ellinor Hjelm Biological Sciences, SOLS	<i>SOLUR Research Project:</i> Total antioxidant capacity of foods based on level of processing	<i>-Presented research at 2021 SOLS UG Research Symposium -2020-2021 SOLUR Student</i>
Co-Chair 11/18-5/22	Nafis Eghrari Biomedical Sciences, SOLS, ASU	<i>Honor's Thesis:</i> Differential expression profile of sphingosine-1-phosphate receptors in human brain vascular smooth muscle cells and endothelial cells following hypoxia plus glucose deprivation <i>Mentor:</i> Rayna Gonzales, UA-Phoenix	
Member 09/21-04/22	Dean Drake Biomedical Sciences, SOLS, ASU	<i>Honor's Thesis:</i> Predictors of plasma protein levels in house finches: The roles of urbanization, molt, disease status, and body condition <i>Mentor:</i> Kevin McGraw, SOLS, ASU	
Member 12/20-11/21	Kathryn DePinto Biological Sciences, SOLS	<i>Honor's Thesis:</i> Back to the future: Does previously grown ornamental coloration in male house finches reveal mate quality at the time of pair formation? <i>Mentor:</i> Kevin McGraw, SOLS, ASU	
Chair 3/20-4/9/21	Asfia Numani Biological Sciences, SOLS	<i>Honors Thesis:</i> Fetal growth models of cardiac size, shape and function, and prediction of congenital cardiomyopathy in fetuses with diabetic mothers <i>Mentor:</i> Jon Plasencia, Phoenix Children's Hospital	
Chair 3/20-4/9/21	Shambhavi Mishra Biological Sciences, SOLS	<i>Honors Thesis:</i> Fetal growth models of cardiac size, shape and function, and prediction of congenital cardiomyopathy in fetuses with diabetic mothers <i>Mentor:</i> Jon Plasencia, Phoenix Children's Hospital	
Member 10/19-4/13/21	Matthew Siegel School of Molecular Sciences, ASU	<i>Honors Thesis:</i> Role of the pro-inflammatory Bradykinin type 1 receptor in tissue remodeling associated with chronic hypertension <i>Mentor:</i> Jeremy Mills, SMS, ASU	

Chair 08/20-4/9/21	Carissa McEvoy Human Nutrition <i>Co-authored publication</i> #58	<i>Honor's Thesis:</i> Effects of intermittent fasting regimens on circulating markers of oxidative stress in humans: A systematic review of randomized controlled trials
Member 6/20-3/29/21	Shayna Bauer Biological Sciences, ASU	<i>Honor's Thesis:</i> The potential effect of vinegar ingestion on alleviating depression through restored gut microbiome composition. <i>Mentor:</i> Carol Johnston, CHS
Chair 3/19-4/1/21	Rijul (Raj) Jain Biological Sciences, ASU <i>Co-authored publication</i> #60	<i>Honors Thesis:</i> Systematic review of the impact of genistein on diabetes related outcomes
Mentor Fall 2020	Marie Langlois	<i>Honors Contract, HCD 400:</i> Exploring genistein for treatment of hyperglycemia in diabetes.
Mentor Fall 2020	Faith Kyaruzi Medical Studies, CHS	<i>Honors Contract, HCD 400:</i> Finding journal articles for a systematic review and meta-analysis on the relationship between urbanization and blood sugar in birds.
Mentor 07/20-11/20	Sarah Mathias Biological Sciences, SOLS	<i>Independent Project:</i> Comparison of nutritional physiology in urban vs rural birds.
Chair 3/19-5/20	Michael Renner Biological Sciences, ASU <i>Co-authored publications</i> #52 & 55	<i>Honors Thesis:</i> Tibial vasodilation in mourning doves on a Western-style diet – defended in 2020, continued to conduct independent research as a post-bacc.
Chair 05/18- 4/30/20	Jason Cusimano Medical Microbiology, ASU	<i>Honors Thesis:</i> Investigation of whether glucocorticoids induce insulin resistance in skeletal muscle via interaction with TXNIP <i>Mentor:</i> Peter Reaven, VA Medical Center, Phoenix, AZ
Chair 05/18- 3/20/20	Lana Kayata Biological Sciences, ASU <i>Co-authored publication</i> #55 <i>Initial position after graduation: Dental Student at Midwestern University, Glendale</i>	<i>Honors Thesis:</i> Effects of an Urban diet on glucose, sodium, and osmoregulation in the mourning dove (<i>Zenaida macroura</i>)
Member 3/19-5/19	Jacqueline Moreno Biological Sciences, ASU	<i>Honors Thesis:</i> Food choice and Health Status of Birds. <i>Mentor:</i> Kevin McGraw, SOLS, ASU

Member 6/18-5/19	Laren Schaper Biological Sciences, ASU	<i>Honors Thesis:</i> Bird-feeder cleaning lowers disease severity in rural but not urban birds. <i>Mentor:</i> Kevin McGraw, SOLS, ASU	
Chair 08/18-4/19	Kasandra Rascon Biology, ASU	<i>Honors Thesis:</i> Effects of menthol on weight regain and maintenance of caloric restriction, defended 4/11/19 <i>Co-mentor:</i> Richard Herman, SMS	
Chair 12/16- 3/26/19	Courtney Wood Biological Sciences, ASU <i>Initial position after graduation: MS student, Medical Nutrition program, ASU</i>	<i>Honors Thesis:</i> Novel organometallic complex mitigates liver injury caused by a 10-week high fat diet in adolescent male Sprague-Dawley rats.	
Mentor 3/18-05/19	Monique Bertin Biological Sciences, ASU	Lab assistance with ecophysiology projects	<i>SOLUR Apprentice (2018-2019)</i>
Mentor 08/18-05/19	Mohamad Abdallah Biological Sciences, ASU	Lab Assistant	
Chair 3/17- 11/14/18	Sanna Rahman Biological Sciences, ASU	<i>Honors Thesis:</i> Hypoxia plus glucose deprivation increases NF-kB activation and downstream pro-inflammatory enzyme levels in human brain VSM cells. <i>Co-Chair:</i> Rayna Gonzales, University of Arizona COM - Phoenix	
Chair 12/16- 10/31/18	Ashlee Starr Biological Sciences, ASU	<i>Honors Thesis:</i> Evaluation of OMC-mediated glucose regulation in muscle	
Chair 09/16- 4/16/18	Lorne Lambries Health Sciences, ASU	<i>Honors Thesis:</i> Impact of sumac on lowering oxidative stress as it pertains to dementia	
Member 4/17-4/10/18	Laura Stokes Biochemistry (Medicinal Chemistry), ASU	<i>Honors Thesis:</i> The influence of extracellular mitochondria on neuroinflammation. <i>Chair:</i> Boris Decourt, Biodesign, ASU	
Chair 12/16-4/6/18	Arturo (Niko) Rojas Health Sciences, ASU	<i>Honors Thesis:</i> Growing Mya-1 feline regulatory T cells for adoptive immunotherapy. <i>Co-Chair:</i> Angela Mexas, Midwestern University, Glendale, AZ	
Member 08/15-05/16	Brooke Sykes Biological Sciences, ASU	<i>Honors Thesis:</i> Urban-rural Variation in color and parasites in female house finches. <i>Mentor:</i> Kevin McGraw, SOLS, ASU	

Chair 08/14- 03/21/18	Alice Gadau Biological Sciences, ASU <i>Co-authored Publication</i> #25, 43 <i>Initial position after</i> <i>graduation: Doctoral</i> <i>Student, The Rockefeller</i> <i>University, New York, NY</i>	<i>Honors Thesis:</i> Putative vasodilatory role of insulin in birds	<i>2017-2018, 2016-2017</i> <i>and 2015-2016 School</i> <i>of Life Sciences</i> <i>Undergraduate</i> <i>Researcher (SOLUR)</i> <i>Fellowship, ASU</i>
Chair 12/16-10/17	Robyn Bartel Biological Sciences, ASU	<i>Honors Thesis:</i> Lenalidomide modulates high fat diet induced inflammation in human vascular smooth muscle cells.	
Mentor 05/16-08/17	William Clark Biological Sciences, ASU <i>Co-authored publication</i> #48	<i>Independent Project:</i> Effects of urban nutrition on glucose regulation in wild mourning doves.	<i>2017 IOSP</i> <i>Undergraduate</i> <i>Summer Research</i> <i>Fellowship, American</i> <i>Physiological Society</i>
Member 2/17-12/17	Chandan Saini Psychology, ASU	<i>Honors Thesis:</i> The effects of artificial light at night on immune development in a precocial bird. <i>Mentor:</i> Kevin McGraw, SOLS Volunteer researcher in the lab, assisted with various projects, enrolled in BIO 495	
Mentor 12/16-7/17	Austin Lehew Biological Sciences		
Mentor 08/15-05/17	Daphne Lodes (Eagleman) Biological Sciences, ASU <i>Initial position after</i> <i>graduation: Doctoral</i> <i>student at U Illinois at</i> <i>Urbana Champaign</i>	Effects of in vitro glucose exposure on avian vascular reactivity; Exploring the relationship between osmolarity and glucose in birds	<i>Invited to present</i> <i>research seminar at the</i> <i>2016 AzPS Conference</i>
Chair 8/16- 04/10/17	Hanna Sivak Biological Sciences, ASU	<i>Honors Thesis:</i> Diet-induced thermogenesis as measured by exogenous norepinephrine injections in high fat diet-fed rats: A pilot study	
Member 09/16- 03/30/17	Timothy Panknin Health Sciences, ASU	<i>Honors Thesis:</i> Cardioprotective effects of high intensity interval training following Doxorubicin treatment. <i>Mentor:</i> Siddhartha Angadi, ESHP, ASU <i>Honors Contract: HSC 420</i>	
Mentor Spring 2017	Amr Nasef College of Health Solutions, ASU		
Mentor Spring 2017	Lauren Martinez Health Sciences, ASU	<i>Honors Contract: HCD 400</i>	
Mentor 05/16-11/16	Kali Mahrer Biological Sciences, ASU	Evaluation of antioxidant nature of uric acid in avian arteries following high glucose exposure	

Member 08/15-05/16	Joan Hearn Nutrition, ASU	<i>Honors Thesis:</i> Is it hunger or hormones? Association of plasma ghrelin levels with eating behaviors and weight cycling history in obese and overweight women. <i>Mentor:</i> Pamela Swan, ESHP, ASU	
Mentor 08/14-5/16	Troy Wagner Biological Sciences, ASU	<i>Team project:</i> Evaluation of effectiveness of sesame seed oil at reversing complications associated with pre-diabetes.	
Mentor 05/19/14- 08/19/14	Marc Girard Bioinformatics, University of Poitiers, France <i>Co-authored Publication</i> #39 <i>Currently employed as a LIMS Consultant for INFOGENE, Region de Lyon, France</i>	<i>Independent project:</i> Role of dietary carotenoids in reducing tissue oxidative stress in ducks.	<i>Summer research fellowship from Univ. Poitiers to gain research experience in my laboratory.</i>
Member Spring 2015	Alexander Funk Conservation Biology and Ecology, SOLS, ASU <i>Co-authored publication</i> #47	<i>Honors Thesis:</i> Evaluating the influence of urbanization on quail physiology and responses to stress. <i>Chair:</i> Pierre Deviche, SOLS, ASU	
Chair 1/14-12/16	Liam O'Neill Biological Sciences, ASU <i>Initial position after graduation: Rowan University Cooper Medical School, Class of 2022</i>	<i>Honors Thesis:</i> High-intensity exercise preconditioning prevents downregulation of eNOS expression in the aorta following doxorubicin treatment.	<i>2015 Athletics Research Grant, GPSA, ASU</i>
Mentor 8/13-5/16	Zoha Ahmed Biological Sciences, ASU <i>Co-authored Publication</i> #29 <i>Initial position after graduation: University of Arizona College of Medicine, Class of 2021</i>	<i>Independent projects:</i> Contribution of muscle to glucose regulation in birds. Comparison of fat ingestion by birds living in urban and desert environments. <i>Team Project:</i> High glucose impairs acetylcholine-mediated vasodilation in isolated arteries from mourning doves (<i>Z. macroura</i>).	<i>2015-2016 School of Life Sciences Undergraduate Research (SOLUR) Fellowship, ASU</i> <i>2015-2016 Ralph A. Fisher Jr. Scholarship, School of Life Sciences;</i> <i>2014-2015 School of Life Sciences Undergraduate Research Fellowship</i>
Chair Fall 2012- Spring 2015	Noor Raad Biological Sciences, ASU	<i>Honors Thesis:</i> Replacing dietary meat with fish significantly increases plasma glucose without affecting protein glycation.	

	<i>Initial position after graduation: Research and Community Outreach Coordinator, Memorial Sloan Kettering Cancer Center, New York, NY</i>		
Chair Fall 2013- Spring 2015	Soukaina Kouteib , Biological Sciences, ASU	<i>Honors Thesis: The role of lipolysis in regulating plasma glucose concentrations in mourning doves.</i>	<i>Spring 2015 SOLUR Fellowship, ASU</i>
Chair Fall 2012- Spring 2015	Matthew Calhoun Biochemistry, ASU <i>Co-authored Publication #24</i>	<i>Honors Thesis: Hepatic inflammatory response following high fat diet in adolescent male Sprague-Dawley rats.</i>	<i>2013 APS Summer Undergraduate Research Fellowship</i>
Chair Fall 2012- Spring 2015	Anna Simperova Animal Physiology and Behavior, SOLS, ASU <i>Co-authored Publication #25, 27</i>	<i>Honors Thesis: Genistein-mediated diet tends to increase oxidative stress in the vasculature of ob/ob mice.</i>	<i>2014-2015 School of Life Sciences Undergraduate Research Fellowship 2014 Nominated, Undergraduate Student of the Year, SOLS 2013-2014 School of Life Sciences Undergraduate Research Fellowship</i>
Member Spring 2014	Stephanie Helland Nutrition Program, ASU	<i>Honors Thesis: Effects of novel functional food on wellness indicators in college students. Mentor: Carol Johnston, Nutrition, ASU</i>	
Member Spring 2014	Janine Faraj Biological Sciences	<i>Honors Thesis: Differential activation of unfolded protein response in two metastatic osteosarcoma cell lines following hypoxic and chemotherapeutic stress. Research Mentor: Aparna Sertil, UA, Phoenix</i>	
Mentor 5/13-8/13	Katerine Diaz Marin, MS, RD , Dietetics and Nutrition, Florida International University, Miami <i>Current position: Registered Dietitian and Adjunct Professor, Florida International University, Miami, FL</i>	<i>Independent project: Role of muscle in avian glucose regulation.</i>	<i>2013 STEP-UP summer fellowship from APS</i>
Mentor 1/13-8/13	Danielle Alder Nutrition Program, ASU	Lab technician for funded Almond grant, assisted with recruitment.	
Mentor Fall 2013	Sean Rayle SNHP, ASU	Assisted with mass spectrometry analyses of avian samples	
Mentor 1/13-8/13	Scott Ghormley Biology, ASU	General lab assistance.	

Mentor 8/11-7/13	Tiffany Juan Bioengineering, ASU <i>Co-authored Publication</i> #25 <i>Current position: Direct Care Worker, Alarys Home Health, Phoenix, AZ</i>	<i>Independent project:</i> Pathophysiological consequences of schistosome infections in doves.
Mentor 9/12-12/12	Amanda Caskey Nutrition Program, ASU	<i>Independent project:</i> Role of diet in glucose regulation across species.
Mentor 1/12-5/13	Corey Frahm Health Sciences Program, ASU <i>Initial position after graduation: Pharmacy Graduate Program, U Arizona, Tucson</i> <i>Current position: Pharmacist, Banner University Medical Center, Scottsdale, AZ</i>	<i>Independent project:</i> The controversial role of leptin in birds.
Chair 8/11-5/13	Tyler Liss Health Sciences Program, ASU <i>Initial position after graduation: Medical Student, U Arizona, Phoenix</i> <i>Current Position: Long Term Disability Senior Claims Examiner, Chandler, AZ</i>	<i>Honors Thesis:</i> Triglyceride accumulation following high fat, but not high sucrose, diets in young male Sprague-dawley rats.
Mentor 8/11-5/12	Diana Soweiden Health Sciences Program, ASU <i>Currently in medical school at Midwestern U-Glendale, AZ</i>	<i>Independent project:</i> Effects of acute exposure to high glucose on tissue oxidative stress.
Mentor 6/11-8/11	Carolina Pusec, PhD Dept of Physiology, UA, Tucson <i>Co-authored Publication</i> #19 <i>Currently enrolled in medical school at the University of Illinois, Chicago</i>	<i>Independent project:</i> Endothelial nitric oxide synthase expression in avian arteries.

Mentor 8/09-6/11	Natalie Rodriguez Nutrition Program, ASU <i>Co-authored Publication #17</i> <i>Initial position after graduation: Nursing Student, Brookline College-Phoenix</i>	<i>Independent project: Stress-mediated alterations of avian glucose homeostasis.</i>	<i>2010 APS/NIDDK Minority Travel Fellowship for Experimental Biology conference</i>
Mentor 1/09-4/11	Mateja Lekic Applied Biological Sciences, ASU <i>Co-authored Publication #8, 19</i> <i>Initial position after graduation: Medical Student, U Arizona, Tucson</i> <i>Current Position: Internal Medicine physician at Banner University Medical Center, Phoenix, AZ</i>	<i>Independent project: Mechanisms of high fat diet-mediated impairment of vascular reactivity.</i>	<i>3rd place, UG poster award competition, 2010 Arizona Physiological Society conference</i>
Mentor 1/09-8/10	Maggie Garvin Nutrition Program, ASU <i>Initial position after graduation: Naturopathic Medical Student, SCNM-Chandler, AZ</i>	<i>Independent project: Comparison of glucose concentrations across birds, mammals, and reptiles.</i>	
Mentor 1/09-8/10	Richard Sparr Applied Biological Sciences, ASU <i>Co-authored Publication #16, 34</i> <i>Currently a Quality Coach at Western Governor's University</i>	<i>Independent project: Putative role for insulin in glucose excretion in birds.</i>	
Chair 2008-2009	Christina Smith Nutrition Program, ASU <i>Co-authored Publication #12, 19</i>	<i>Honors Thesis: The effects of advanced glycation end products and oxidative stress in the vasculature of birds.</i>	<i>3rd place, UG poster award competition, 2009 Arizona Physiological Society conference</i>

High School Trainees Since Employment at ASU

Role/dates	Student/Field	Research Paper
9/13-12/13	Karthik Uppaluri	<i>Independent project: Correlation of plasma glucose concentrations and dietary habits across species of animals at the Phoenix Zoo.</i>

Peer-reviewed Open Access Teaching Resource Since Employment at ASU

Sweazea KL. (2011) Glucose Tolerance Test for Endocrine Labs. *The American Physiological Society Archive of Teaching Resources.*

<https://www.lifescitrc.org/resource.cfm?submissionID=4948>

**This was a laboratory activity that I developed and submitted to the archive for broad dissemination to faculty teaching endocrine physiology to undergraduate students.*

APS Career Resources Trading Cards – Karen Sweazea

<https://www.lifescitrc.org/resource.cfm?submissionID=11486>

SERVICE TO PROFESSION

- 2023-2024 Special Issue Editorial Team, *Topic: Urbanization and Avian Physiology*, *Frontiers in Physiology*
- 2023 Invited, Review Editor, *Frontiers in Nutrition, Nutrition and Metabolism*
- 2023 Invited, Review Editor, *Frontiers in Physiology*
- 2021 Invited Ad hoc peer reviewer for a grant submitted to the French National Research Agency, Paris, France
- 2021 Invited, Associate Editor for a manuscript submitted to *Frontiers in Ecology and Evolution*
- 2020-2024 Invited, Academic Editor, *Journal of Nutrition and Metabolism*
- 2019 Invited Ad hoc peer reviewer for a grant submitted to FWF Austrian Science Fund, Austria.
- 2019-2020 International and Scientific Committee for the 2020 International Symposium on Avian Endocrinology (ISAE) conference which will be held in Edinburgh, Scotland. (postponed due to Covid)
- 2019 Invited Ad hoc peer reviewer for a grant submitted to FWF Austrian Science Fund, Austria.
- 2019 Invited Ad hoc peer reviewer for a Scotland Grant submitted to Heart Research UK
- 2018 Invited Ad hoc peer reviewer for a grant submitted to IDeA Networks of Biomedical Research Excellence (INBRE), New Mexico
- 2018 Judge, poster presentations at 13th annual Western Alliance to Expand Student Opportunities (WAESO), ASU, Tempe
- 2017 Invited Ad hoc peer reviewer for 2 grants submitted to The Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO), Belgium.
- 2013 Judge, 2013 Spirit of Innovation Challenge, Conrad Foundation.
Judged online presentations from high school students in STEM fields for this annual competition. <http://www.conradawards.org/pages/soic-challenge>
- 2010 Invited Ad hoc peer reviewer for a report submitted for a CRIS/AgriLife Research Project, US Department of Agriculture

American Society for Nutrition (ASN)

- 2014 Reviewer for ASN Predoctoral fellowship applications.

Association of Women in Science (AWIS)

- 2011-2016 Treasurer for AWIS, Central Arizona Chapter

The American Physiological Society (The APS)

- 2023-present Programming Committee, Comparative and Evolutionary Physiology Section of the American Physiological Society
-Organizing sessions for conferences
- 2019-2025 Elected, Awards Chair, Comparative and Evolutionary Physiology Section of the American Physiological Society
- 2019 Meeting Mentor for three Caroline tum Suden Awardees at the annual Experimental Biology conference in Orlando, FL
- 2019 Reviewed Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award applications
- 2018 Judge, poster and oral (Scholander competition) presentations, APS Intersociety Meeting on Comparative Physiology, New Orleans, LA
- 9/12/18 Participated in the Integrative and Organismal Systems Physiology Brainstorming Summit to discuss mentoring and undergraduate training in research and professional development skills, American Physiological Society
- 2018 Online instructor for the American Physiological Society IOSP Professional Development Course. Topics: Career Comparisons; Ethics in Research; Writing Summer of Science Blog Entry
- 2018 Invited Reviewer, IOSP Undergraduate Summer Research Fellowship applications
- 2017-2019 Appointed member, Chapter Advisory Committee
- 2018 Invited member, APS Subcommittee on Chapter Strategic Plan on Governance Task Force – meets four times per year (in-person and by conference call)
- 2017 Online instructor for the American Physiological Society IOSP Professional Development Course: Writing a Hypothesis; Abstract reviews
- 2017-2018 Invited participant to contribute feedback for the APS Life Science Teaching Resource Community forum and blog
- 2017-2018 Invited member of the APS Life Science Teaching Resource Community (LifeSciTRC) Review Board; review submissions, submit teaching resources
- 2016-pres** Invited member of the Editorial Board of the American Journal of Physiology – Regulatory, Integrative and Comparative Physiology
- 2015 Online instructor for the American Physiological Society IOSP Professional Development Course, Assignment 4: Ethical Issues in Research and Publication
- 2015-2017 Judge, Scholander Poster Competition, Comparative and Evolutionary Physiology section
- 2015 Online instructor for the American Physiological Society IOSP Professional Development Course, Assignment 2: Writing a Hypothesis
- 2015-2018 Elected, Women in Physiology Committee

2016-2018

- Chair, WIPC Facebook/Twitter subcommittee
- Provided tags and descriptions of past WIPC articles online
- Reviewed Bodil-Schmidt Neilson Distinguished Mentor and Scientist Award Applications
- Reviewed Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award applications

2015

- WIPC Facebook/Twitter Subcommittee/Coordinator
- Reviewed Bodil-Schmidt Neilson Distinguished Mentor and Scientist Award Applications
- Reviewed Caroline tum Suden/Frances Hellebrandt Professional Opportunity Award applications
- 2014 APS Abstract-based Travel Award Judge for the Comparative Approaches to Grand Challenges in Physiology Intersociety meeting
- 2014-2015 Professional coach, Integrative and Organismal System Physiology (IOSP) Fellow, *M. Alrubaiee*, University of Maryland College Park - online
- 2014 Experimental Biology conference Meeting Mentor for a graduate minority travel fellow (R. Rodriguez-U California, Merced) from the Endocrinology and Metabolism Section of the APS
- 2013-2017 Judge, IOSP Undergraduate Research Fellowship applications
- 2012-2021** Official Meeting Blogger, FASEB
- 2012-2018 Advisory Board for National Science Foundation, Integrative Organismal Systems Broadening Participation program (IOSP), “APS Broadening Participation in Undergraduate Research Experiences.”
- 2010-2015 Comparative and Evolutionary Physiology (CEP) Section Treasurer
- 2010-2012 Elected, Communications Committee
I wrote the original draft of the Endocrinology portion of the www.physiologyinfo.org consumer website.
- 2010 Co-Organizer, Career Workshop, 2010 APS Intersociety Comparative and Evolutionary meeting.
- 2010 Judge, Student Travel Award, APS Intersociety Meeting
- 2009, 2014 Judge, Caroline tum Suden/Frances Hellebrandt Professional Opportunity Awards
- 2006-2009 Trainee Advisory Committee: Comparative and Evolutionary Physiology Section Representative; Judge, Early Career Professional Service Award; Trainee Needs Assessment Survey Subcommittee; Liason for The APS Communications Committee; Co-Chair, 2009 The APS Trainee Symposium, “Mentoring Strategies: Beyond the Bench”, Experimental Biology Conference, New Orleans, LA
- 2006-2009 Trainee Advisory Committee Representative on the CEP Section Steering Committee, APS
- 2006-2009 Communications Committee, Trainee Representative; Judge, AAAS Science and Engineering Mass Media Fellowship

Arizona Physiological Society

- 2023 Judge Graduate and Medical Student abstracts, 2023 Arizona Physiological Society conference
- 2020 Reviewed graduate student abstract submissions for annual conference
- 2018-2019 **Past-President**
Help organize fall conference; review abstracts; put together program booklet; solicit vendors; organize/chair vendor show; judge 14 oral presentations from graduate students and postdoctoral fellows
- 2017-2018 **President**
Organize annual fall conference; review abstracts; put together program booklet; solicit vendors; organize/chair vendor show; judge poster presentations

- 2017 **President-Elect**
 Help organize fall conference and review abstracts; solicit vendors; judge poster presentations
- 2015 Judge, Graduate student and Postdoctoral Fellow poster presentations at the annual conference

Sigma Xi, The Scientific Research and Honor Society

- 2020 Volunteer Reviewer for Membership Nominations
- 2019 Selected by the President of Sigma Xi to be one of 6 members of the Teller Committee at the annual conference. Responsible for collecting and counting votes taken during Caucus meetings.
- 2017-2023** Sigma Xi Committee on Qualifications and Membership
- 11/12/16 Sigma Xi Diversity Task Force, Annual meeting, Atlanta, Georgia
- 2014-pres** **President, ASU Chapter of Sigma Xi**
- 2013 Special Awards Judge, Intel International Science and Engineering Fair, Phoenix, AZ
- 2013 Judge, 2013 online Student Research Showcase

Society for Integrative and Comparative Biology (SICB)

- 2010 Judge, Student Travel Awards, Annual Meeting

Journal Ad Hoc Reviewer (last 5 years listed)

Acta Physiologica; American Journal of Physiology – Endocrinology and Metabolism; American Journal of Physiology – Gut and Liver Physiology; American Journal of Physiology – Heart and Circulatory Physiology; American Journal of Physiology – Regulatory, Integrative and Comparative Physiology; Applied Physiology, Nutrition, and Metabolism; Arab Gulf Journal of Scientific Research; Avian Biology; BMC Veterinary Research; Comparative Biochemistry and Physiology A and B; Conservation Physiology; Frontiers in Nutrition; International Journal of Molecular Sciences; Italian Journal of Animal Science (2); Journal of Animal Physiology and Animal Nutrition; Journal of Experimental Biology; Journal of Neurophysiology; Journal of Nutrition and Metabolism; MDPI – Antioxidants; MDPI – Pharmaceutics; Microcirculation; Microvascular Research; Physiological Reports; PLOS ONE; Urban Ecosystems

MentorNet Online Mentoring Program

- 04/10-11/10 **N. Bobbit**, Portland State University. I also served as his McNair Scholar Mentor, Portland State University, Oregon, Summer 2010.
- 07/09-03/10 **R. Franklin**, Syracuse University
- 08/08-05/09 **A. George**, Colorado State University

SERVICE TO EXTERNAL COMMUNITY

- 2018 Led tour of the LSA Courtyard for 6-12th grade Chief Science Officers attending the Leadership Summit at ASU
- 2018 Volunteered at UMOM, A Day of Social Outreach, ASU
- 2016 Invited STEM speaker and panelist to explain career options for students attending the Girls Leadership Academy high school, Phoenix, AZ

- 2014 Invited to mentor undergraduate summer research fellows, 2016-2019 BUILDing SCHOLARS (**B**uilding **I**nfrastructure **L**eading to **D**iversity: **S**outhwest Consortium of **H**ealth-**O**riented education **L**eaders and **R**esearch **S**cholars) NIH-funded program, University of Texas-El Paso.
- 2013 Faculty leader, STEM in the Middle, ASU Preparatory Academy, Phoenix, AZ. *I developed and conducted five 3.5-hour workshops on Saturdays to teach middle school students about comparative, digestive and urinary physiology.*
- 2013 Reviewer for Medical Student Prospectus, University of Arizona College of Medicine, Phoenix
- 2011 Developed and Led a Physiology Understanding (PhUn) Week Event for 2nd graders, Kyrene de los Niños Elementary School, Tempe, AZ, 11/9 *I developed a 'Hopscotch through the Heart' game to help students learn about cardiac physiology (see abstracts: Rodriguez et al. 2012).*
<https://www.lifescitrc.org/resource.cfm?submissionID=6719>
- 2009 Volunteer, Arizona Science and Engineering Fair
- 2008 Judge, Central NM Science and Engineering Research Challenge
- 2007 Intel International Science and Engineering Fair, Albuquerque, NM
- Fall 2007 Co-Coordinator, PhUn Week event, Bosque High School, Albuquerque, NM
- 2005, 2007 Rio Rancho High School Research Expo (grades 9-12), NM

Media

- 10/2020 Invited blog entry, "Of Pets, People and Lucky Ducks: Risks of Covid-19 Transmission", *I Spy Physiology* blog, American Physiological Society
- 3/2020 Interviewed, "Working Off-site: How to do great work outside the lab" Q&A published in *The Physiologist Magazine*. March 2020 issue, pp. 12-13.
https://www.the-aps.org/docs/default-source/tphysmag2019/tphys_march20_web.pdf?sfvrsn=3b69a51e_2
- 9/2019 Interviewed by the American Physiological Society for the *Under the Microscope* series published in *The Physiologist Magazine*. September 2019 issue, pp. 15-16.
https://www.the-aps.org/docs/default-source/tphysmag2019/tphys_sept2019_web.pdf?sfvrsn=5dcbc070_4
- 9/13/17 Invited blog entry, "A nutty way to curb cravings", *I Spy Physiology* blog, American Physiological Society
- 9/22/16 Invited blog entry, "Shhhhhh....I'm hibernating", *I Spy Physiology* blog, American Physiological Society
- 8/17/16 Invited blog entry, "If only birds could compete in the summer games", *I Spy Physiology* blog, American Physiological Society
- 2015 Featured Physiologist on the American Physiological Society's trading cards through the Careers in Physiology section
- 9/10/15 Invited blog entry, "Could fresh breath cause high blood pressure?", *I Spy Physiology* blog, American Physiological Society
- 8/12/15 Invited blog entry, "Look to the sky for lessons in high blood sugar", *I Spy Physiology* blog, American Physiological Society
- 2010-pres Invited Blogger for National Geographic Digital Media and American Physiological Society

SERVICE TO UNIVERSITY, COLLEGE AND UNIT

University

2019-2020 Judge, Central Arizona Phoenix Long Term Ecological Research Project All Scientists Poster Symposium, ASU Skysong

2014-pres Institutional Animal Care and Use Committee (IACUC), ASU
2012 Volunteer for ASU Commission on the Status of Women/Staff Council Professional Development Conference, ASU.

2010-2015 Obama Scholars Mentor, ASU.

2010-2011 Forward to Professorship Conference organizing committee, AWIS, Central Arizona Chapter

2/23/09 Spoke at ASU Future Freshman Reception, Culver City, CA

5/02-5/05 Graduate and Professional Student Council (GPSC), University of Arizona, Tucson: Chair, Academic Affairs Internal Committee; Representative, Ad Hoc Grade Appeal Subcommittee; Chair, Outreach Subcommittee; Representative, Faculty Senate Committee

College

11/06/23 Peer reviewer, Faculty Jumpstart grants

10/05/23 Met with nutrition students in CHS 101 to welcome them to ASU and encourage them to join Barrett and get involved in research

Fall 2023 Participated in Downtown Barrett Welcome event, ASU

Spring 2023 Recruitment: Sent out postcards welcoming new students to CHS and ASU

2022-2023 Metabolomics Assistant Professor Search Committee

7/19/22 Participated in Faculty Hangout Session for new CHS students

2021-2023 Metabolomics Faculty Search Committee

2021-2022 Basic Nutrition Science Faculty Search Committee

2021 Teaching Peer Review - E Green

2021-2022 T32 Task Force – exploring options to apply for T32 funds to support ENS graduate students

2020-2022 Progressive Exam Task Force – seeking to align exam with course objectives and needs of students

2020-2023 ENS Grad Club Advisor

2020-2023 Member, ENS Executive Committee

2020-2022 Member, CHS Personnel Annual Review Committee

Fall 2019- Spr 2020 Co-chair of Exercise Physiology Tenure Track Search Committee

Summer-Fall 2019 Personnel Subcommittee: Annual review group developing group composition, process and structure

Spring 2019 Peer reviewer, Jumpstart Faculty Grants

2018-2022 CHS Personnel Committee, Elected member

Fall 2018 SNHP Personnel Committee, 3rd year reviews

Spring 2018 Peer reviewer, Faculty Jumpstart Grants

Spring 2018 CHS Success Hub - Faculty

2017-2018 Elected, Governance Grievance Committee, College of Health Solutions, ASU

Spring 2016	Judge, <i>Downtown Discovers</i> , Barrett Honors Student Poster Presentations, Downtown Campus, ASU
Fall 2015	College of Health Solutions Student Engagement Team, ASU
2015-2017	Non-tenure Eligible Personnel Committee, College of Health Solutions, ASU
Fall 2013	Attended College of Health Solutions Friends and Family Open House
2013, 2016	School of Life Sciences Undergraduate Research (SOLUR) Application Review ad hoc Committee, SOLS
Summer 2011	Organized and ran a workshop on understanding neurophysiology for high school seniors attending the CONHI Summer Camp
Fall 2008	Volunteered at “Break-Feast”, ASU Polytechnic
2008	Judge, Graduate Student Research Day Poster Presentations, UNM

Unit

Nutrition Academic Program, College of Health Solutions

2024	ENS Program Admission and Course Change Subcommittee
2023	External Tenure and Promotion Reviews for peer institutions
09/08/23	Participated in <i>Identity Stories</i>
08/25/23	Participated in <i>Nutrition Identity Language Stories</i>
11/18/22	Tempe Barrett Expo retention and recruitment event, Represented CHS
11/16/22	<i>Up Beet</i> zoom meeting student retention event
11/09/22	Participated in the ENS Prospective Student Event for International Students
11/02/22	Participated in Tempe Transfer Day tabling event, CHS recruitment
10/27/22	Participated in the ENS Prospective Student Event for International Students
10/25/22	<i>Up Beet</i> zoom meeting student retention event
10/19/22	<i>Lunch Bunch</i> , Nutrition Student Retention event
2022-2023	Executive Committee, Biology PhD Program, SOLS
2020-2023	Program Co-Director and Co-Chair of the Executive Committee, Exercise and Nutritional Sciences (ENS) doctoral program, CHS
	2022-2023: 7-year Academic Program Review
	2022-2023: Aligned course outcome measures with Academic Program Assessment and program learning objectives
	2022 Created rubrics for the Dissertation Proposal and Defense to align with program learning objectives and outcomes
	2022 Co-chaired a subcommittee to create a Basic Translational Science Research Methods course to meet the needs of incoming students focusing on Basic Nutrition Science
	2022 Eliminated GRE requirement for admissions (effective 2023) to increase program accessibility
	2021-2022: Revised program Bylaws
	2022 Revised Academic Program Assessment criteria

2022 Co-chaired subcommittee to evaluate learning objectives and outcomes and eliminated progressive exam as a milestone as it did not align with course outcome measures

2021 Revised Academic Program Assessment criteria

Spring 2019

Mock Grant Reviewer, EXW 701

School of Nutrition and Health Promotion (disestablished in 2018)

2018-2019 Floor Fire Warden, 5th Floor LSC, SOLS

Spring 2018 Interviewed PhD candidates for the ENS doctoral program

Spring 2018 Tenure Track Faculty Search Committee, Nutrition program

2017-2019 Faculty research opportunities for students website manager, Nutrition

Fall 2016 Promotion and Tenure ad hoc committee, SNHP

8/11/16 Workshop, “Working with Honors Students” for Lecturers in Nutrition and Health Sciences programs, SNHP

2015-2017 Annual Review Committee Member, Tenure Track Faculty, SNHP

Fall 2015 Chair, Ad hoc Personnel Multi-year Contract Renewal Committee, SNHP

Fall 2015 Ad hoc Personnel NEW Multi-year Contract Committee, SNHP

Fall 2015 Probationary Faculty Review Committee, School of Nutrition and Health Promotion

Fall 2015-Fall 2016 Coordinator, Undergraduate Seminar Series, Nutrition Program

Spring 2015 Nutrition Bylaws Revision Committee, Nutrition and Health Sciences Program

Fall 2014-present Barrett Faculty Honors Advisor for Nutrition

Fall 2023 -Welcomed nutrition students
-held advising event at Starbucks, free gift cards to come meet me and interact with students

Fall 2014 Personnel Advisory Committee, Nutrition Program

Fall 2014 Personnel Advisory Committee, Health Sciences Program

Spring 2014 PANW Comprehensive Exam Committee, SNHP

Fall 2013 Curriculum Committee, Health Sciences Program, SNHP
As a founding faculty member of the Health Sciences Program, I was responsible for helping to ensure the integrity of the core curriculum was being met.

Fall 2012 Online Technology Committee to improve Blackboard, SNHP

Spring 2012-2014 Graduate Student (ad hoc) Committee, Nutrition Program, SNHP
The purpose of this committee is to review applications for the Nutrition graduate programs.

Fall 2011 Master’s Competency (ad hoc) Committee, Nutrition Program, SNHP
The purpose of this committee was to review the current requirements of students in the Nutrition program and to make recommendations for improving the competency of the students.

Spring 2009 The Center for Healthy Lifestyles Strategic Planning Unit, ASU Downtown
I was a member of the team that helped to conceptualize and develop the Center for Healthy Lifestyles, which is now part of the College of Health Solutions.

Fall 2008 Healthy Lifestyles Research Center Committee member, ASU Polytechnic

- I was a member of the team that helped conceptualize and develop the Healthy Lifestyles Research Center that later became the Center for Healthy Lifestyles.*
- Fall 2008 Health Sciences Program Proposal Committee member for undergraduate degree program, ASU Polytechnic
As a founding faculty of the Health Sciences Program, I was responsible for helping to develop the new degree program and determine the core curriculum.
- Fall 2008 Conducted BIO202 Human Anatomy and Physiology Field Trip to Mortuary Science program at Chandler Gilbert Community College, Mesa, AZ.
- 8/03-5/04 Graduate Student Representative, Resources Committee, Physiological Sciences Program, The University of Arizona, Tucson
- 7/02-6/03 Graduate Student Representative, Program Committee, Physiological Sciences Program, The University of Arizona, Tucson
- 2001, '04-05 Preceptor for first year students, Physiological Sciences Program, The University of Arizona, Tucson