

**ROBERT PAZDRO**

Department of Foods and Nutrition  
302 Dawson Hall  
305 Sanford Drive  
University of Georgia, Athens, GA 30602

706-542-7504  
rpazdro@uga.edu

**PROFESSIONAL EXPERIENCE**

Associate Professor and Undergraduate Coordinator	University of Georgia, Department of Foods and Nutrition Athens, GA	2019-
Assistant Professor and Undergraduate Coordinator	University of Georgia, Department of Foods and Nutrition Athens, GA	2013-2019

**EDUCATION AND TRAINING**

Postdoctoral Fellow	The Jackson Laboratory Bar Harbor, ME	2010-2013
Ph.D.	Interdepartmental Nutrition Program Department of Nutrition Science Purdue University, West Lafayette, IN	2004-2010
B.A.	Sociology (Major), Biology (Minor) Oakland University, Rochester, MI	2000-2004

**PUBLICATIONS****Peer-reviewed Journal Articles (#denotes UGA student; \*denotes corresponding authorship)**

1. Fagan MM, Harris P, Adams A, **Pazdro R**, Krotky A, Call J, Duberstein KJ. Form of vitamin E supplementation affects oxidative and inflammatory response in exercising horses. *Journal of Equine Veterinary Science*. 91:103103. (2020)
2. Dos Santos TS, Teng PY, Yadav S, Castro FLS, Gould RL#, Craig SW, Chen C, Fuller AL, **Pazdro R**, Sartori JR, and Kim WK. Effects of Inorganic Zn and Cu supplementation on gut health in broiler chickens challenged with *Eimeria* spp. *Frontiers in Veterinary Science*. 7:230. (2020)
3. Yadav S, Teng PY, Souza Dos Santos T, Gould RL#, Craig SW, Lorraine Fuller A, **Pazdro R**, and Kim WK. The effects of different doses of curcumin compound on growth performance, antioxidant status, and gut health of broiler chickens challenged with *Eimeria* species. *Poultry Science*. 99(11):5936-5945. (2020)
4. Castro FLS, Teng PY, Yadav S, Gould RL#, Craig S, **Pazdro R**, and Kim WK. The effects of L-arginine supplementation on growth performance and intestinal health of broiler chickens challenged with *Eimeria* spp. *Poultry Science*. 99(11): 5844-5857. (2020)
5. Castro FLS, Tompkins YH, **Pazdro R**, and Kim WK. The effects of total sulfur amino acids on the intestinal health status of broilers challenged with *Eimeria* spp. *Poultry Science*. 99(10): 5027-5036. (2020)
6. Gould RL# and **Pazdro R\***. Impact of supplementary amino acids, micronutrients, and overall diet on glutathione homeostasis (Review). *Nutrients*. 11(5):1056. (2019)
7. Gould RL#, Zhou Y#, Yakaitis CL#, Love K, Reeves J, Kong W, Coe E#, Xiao Y#, and **Pazdro R\***. Heritability of the aged glutathione phenotype is dependent on tissue of origin. *Mammalian Genome*. 29(9-10):619-631. (2018)
8. Bumgardner SA, Zhou Y#, Jiang Z#, Coe EJ#, Yakaitis CL#, Xiao Y#, and **Pazdro R\***. Genetic influence on splenic natural killer cell frequencies and maturation among aged mice. *Experimental Gerontology*. 104:9-16. (2018)

9. Duberstein KJ, **Pazdro R**, Lee KC, Abrams A, Kane E, and Stuart RL. Effect of supplemental vitamin E form on serum  $\alpha$ -tocopherol levels and blood oxidative stress parameters in response to a novel exercise challenge. *Journal of Equine Veterinary Science*. 57:61-66. (2017)
10. Norris KM#, Okie W#, Kim WK, Adhikary R, Yoo S#, King S#, and **Pazdro R\***. Diet-induced obesity differentially regulates glutathione phenotypes in the obesity-prone mouse strains DBA/2J, C57BL/6J, and AKR/J mice. *Nutrition Research*. 36(12): 1316-1324. (2016)
11. Norris KM#, Okie W#, Yakaitis CL#, and **Pazdro R\***. The anthocyanin cyanidin-3-O- $\beta$ -glucoside modulates murine glutathione homeostasis in a manner dependent on genetic background. *Redox Biology*. 9:254-263. (2016)
12. Jiang Z#, Harrison DE, Parsons ME, McClatchy S, Jacobs L#, and **Pazdro R\***. Heritability of *in vitro* phenotypes exhibited by murine adipose-derived stromal cells. *Mammalian Genome*. 27(9-10):460-468. (2016)
13. Zhou Y#, Jiang Z#, Harris EC#, Reeves J, Chen X, and **Pazdro R\***. Circulating concentrations of growth differentiation factor 11 are heritable and correlate with life span. *Journal of Gerontology, Series A: Biological Sciences*. 71(12):1560-1563. (2016)
14. Zhou Y#, Harrison DE, Love-Myers K, Chen Y, Grider A, Wickwire K, Burgess JR, Stochelski MA, and **Pazdro R\***. Genetic analysis of tissue glutathione concentrations and redox balance. *Free Radical Biology & Medicine*, 71:157-164. (2014)
15. **Pazdro R** and Harrison DE. Murine adipose-derived stromal cell apoptosis and susceptibility to oxidative stress *in vitro* are regulated by genetic background. *PLoS One*, 8(4):61235. (2013)
16. **Pazdro R\*** and Burgess JR. The antioxidant 3H-1,2-dithiole-3-thione potentiates advanced glycation end product-induced oxidative stress in SH-SY5Y cells. *Experimental Diabetes Research*, 137607. (2012)
17. **Pazdro R\*** and Burgess JR. Differential effects of  $\alpha$ -tocopherol and N-acetyl-cysteine on advanced glycation end product-induced oxidative damage and neurite degeneration in SH-SY5Y cells. *Biochimica et Biophysica Acta*, 1822(4):550-556. (2012)
18. **Pazdro R** and Burgess JR. The role of vitamin E in diabetes complications. Review. *Mechanisms of Ageing and Development*, 131(4):276-286. (2010)
19. Antalis CJ, Stevens LJ, Campbell M, **Pazdro R**, Ericson K, and Burgess JR. Omega-3 fatty acid status in attention-deficit/hyperactivity disorder. *Prostaglandins, Leukotrienes, & Essential Fatty Acids*, 75(4-5):299-308. (2006)
20. Shukla LI, **Pazdro R**, Becker D, and Sevilla MD. Sugar radicals in DNA: isolation of neutral radicals in gamma-irradiated DNA by hole and electron scavenging. *Radiation Research*, 163(5):591-602. (2005)
21. Shukla LI, Adhikary A, **Pazdro R**, Becker D, and Sevilla MD. Formation of 8-oxo-7,8-dihydroguanine-radicals in gamma-irradiated DNA by multiple one-electron oxidations. *Nucleic Acids Research*, 32(22):6565-6574. (2004)
22. Shukla LI, **Pazdro R**, Huang J, DeVreugd C, Becker D, and Sevilla MD. The formation of DNA sugar radicals from photoexcitation of guanine cation radicals. *Radiation Research*, 161(5):582-590. (2004)

## RESEARCH SUPPORT

### Active Grants

NIH/NIGMS, R01 GM121551 (**Pazdro, PI**)

7/1/2017-6/30/2022

Title: Defining the genetic architecture of the glutathione redox system

\$1,380,550 (total)

The goal of this project is to identify the genetic loci and specific genes that regulate the endogenous antioxidant system centered on glutathione and NADPH.

USDA HATCH Project (**Pazdro, PI**)

2/1/2021-1/31/2025

Title: Impact of the diet-derived antioxidant ergothioneine on biological aging and cellular senescence

\$2,500/year

The goal of this project is to define the effects of supplementing ergothioneine, a natural antioxidant found in mushrooms, on the aging process and cellular senescence.

University of Georgia Teaming for Interdisciplinary Research Pre-Seed Program Initiative (**Pazdro, PI**)

Title: Mechanisms and drivers of inflammatory bowel diseases

\$2,667

The goal of this project is to build an interdisciplinary team to study the genetic and physiological bases for Crohn's disease and ulcerative colitis.

### **Completed Grants**

University of Georgia – Academic Partnerships and Initiatives, Student Affairs (**Role: Co-investigator; Simmons, PI**)

Title: Exploring faculty awareness and knowledge of student support structures.

\$2,160

The goal of this project is to assess the extent to which faculty members at the University of Georgia are aware of, and knowledgeable about, existing student support resources on campus.

NIH/NIA, R56 AG053309 (**Pazdro, PI**)

9/30/2017-12/31/2019

Title: A systems approach to GDF11 and its effects on cardiac hypertrophy

\$427,035 (total)

The goal of this project is to determine the fundamental relationship between the blood-borne factor GDF11 and cardiac biomarkers and function in a genetically-diverse mouse population.

USDA HATCH Project (**Pazdro, PI**)

8/1/2014-7/31/2019

Title: Genetic determination of diet-induced effects on glutathione balance

\$2,500/year

The goal of this project is to support efforts to identify genes and alleles that govern antioxidant responses to various diets.

UGA Faculty Research Grant in Science and Engineering (**Pazdro, PI**) 7/1/2017-6/30/2019

Title: Developing novel anti-aging therapies by targeting senescent cells

\$8,256

The goal of this project is to use genetics tools to identify potential molecular targets against age-related cellular senescence.

UGA Faculty Research Grant in Science and Engineering (**Pazdro, PI**) 7/1/2016-6/30/2017

Title: Effects of diet on the novel anti-aging hormone growth differentiation factor 11

\$8,700

The goal of this project is to determine the extent to which a high-fat diet influences circulating levels of growth differentiation factor 11 (GDF11).

NIH/NIGMS, F32 (**Pazdro, PI**)

2012-2013

Ruth L. Kirschstein National Research Service Award (NRSA) for Individual Postdoctoral Fellows

Title: Genetic regulation of glutathione redox balance in mice

\$107,701.92 (total)

The goals of this project are to measure the impact of genetic background on glutathione redox balance and support future efforts to identify underlying loci and genes.

### **HONORS AND AWARDS**

2017-

*Faculty Ambassador*

University of Georgia, College of Family and Consumer Sciences

2015, 2017, 2019, 2020

*Certificate Recognition of Significant Contributions to Undergraduate Student Career Development*

University of Georgia Career Center

2014	<i>Faculty Mentoring of Undergraduate Research Award</i> University of Georgia, College of Family and Consumer Sciences
2010	<i>Bilsland Dissertation Fellowship</i> Purdue University
2004	<i>Lynn Graduate Fellowship</i> Purdue University

**TEACHING EXPERIENCE (University of Georgia)**

FDNS 2400	Introduction to Nutrition Science	1 credit	Offered Fall semester
FDNS 3010	Special Problems in Nutrition	Variable credit	Offered every semester
FDNS 4570/6570	Inherited Metabolic Disorders	3 credits	Offered Spring semester
FDNS 8560	Proposal Writing	3 credits	Offered Spring semester

**PROFESSIONAL SERVICE****Ad Hoc Manuscript Reviewer**

*Clinical and Translational Medicine; Federation of American Societies for Experimental Biology (FASEB) Journal; Free Radical Research; International Journal of Environmental Research and Public Health; International Journal of Molecular Sciences; Journal of Steroid Biochemistry and Molecular Biology; Journal of Animal and Feed Sciences; Molecules; Neurochemistry International; Nutrients; Oxidative Medicine and Cellular Longevity; The Journal of Nutrition*