

Patricia G. Wolf PhD, RDN

(217) 898-8734 • gondry2@illinois.edu

POSITIONS AND TRAINING

Assistant Professor

August 2022

Purdue University, West Lafayette, Indiana

Postdoctoral Research Associate

January 2022- August 2022

University of Illinois at Urbana-Champaign, Urbana, Illinois

Mentors: Jason Ridlon and Lisa Tussing-Humphreys

Postdoctoral Research Fellow

January 2019- January 2022

Cancer Education and Career Development Program (T32CA057699) - University of Illinois at Chicago

Mentors: Jason Ridlon and Lisa Tussing-Humphreys

Doctor of Philosophy in Nutritional Sciences

January 2013- December 2018

University of Illinois at Urbana-Champaign, Urbana, Illinois

Mentor: H. Rex Gaskins

Bachelor of Arts in Biology

May 2006

State University of New York College at Buffalo, Buffalo, New York

CERTIFICATES AND LICENSES

Health Disparities Research Certificate

January 2021-Current

University of Illinois Chicago, Chicago, Illinois

Registered Dietitian Nutritionist

April 2019

University of Illinois at Urbana-Champaign, Urbana, Illinois

RESEARCH INTERESTS

Microbial mechanisms of health disparities related to inequitable food quality and access that can be manipulated by diet, behavioral interventions, and public health policy.

PUBLICATIONS

1. **Wolf PG**, Kim S, Tussing-Humphreys L. Socioenvironmental stressors, the gut microbiome and colorectal cancer inequities – A Chicago perspective. *Am J Gastroenterol*- Submitted.
2. Lee JW, Cowley ES, **Wolf PG**, Doden HL, Murai T, Olivos Caicedo KY, Ly LK, Sun F, Nittono H, Daniel SL, Cann I, Gaskins HR, Anantharaman K, Alves JMP, Ridlon JM. Novel Firmicutes enzymes involved in allo-secondary bile acid production. *Gut Microbes*- submitted.
3. Ishaq SL, Wissel EF, **Wolf PG**, Grieneisen L, Eggleston EM, Mhuireach G et al. Designing the Microbes and Social Equity Symposium: A Novel Interdisciplinary Virtual Research Conference Based on Achieving Group-Directed Outputs. *Challenges*. 2022 Jul;13(2).
4. **Wolf PG**, Byrd DA, Cares K, Odoms-Young A, Gaskins HR, Ridlon JM, Tussing-Humphreys L. Bile acids, gut microbes, and the neighborhood food environment - a potential driver of colorectal cancer health disparities. *mSystems*- In press.
5. **Wolf PG**, Cowley ES, Breister A, Matatov S, Lucio L, Polak P, Ridlon JM, Gaskins HR, Anantharaman K. Diversity and distribution of sulfur metabolism in the human gut microbiome and its association with colorectal cancer. *Microbiome*- In press.
6. Willis NB, Muñoz CX, Mysonhimer AR, Edwards CG, **Wolf PG**, Hillman CH, Burd NA, Holscher HD, and Khan NA. Hydration biomarkers are related to the differential abundance of fecal microbiota and plasma lipopolysaccharide binding protein in adults. *Annals of Nutrition and Metabolism*- In press.
7. **Wolf PG**, Sanchez-Flack JC, Buscemi J, Fitzgibbon ML, Gaskins HR, Ridlon JM, Kim S, Tussing-Humphreys L. Support policies that foster a healthy food environment and incentivize healthy food purchases to mitigate cancer inequities. *Transl Behav Med*. 2021 Jul 5:ibab081.

8. Ishaq SL, Parada Flores FJ, **Wolf PG**, Bonilla CY, Carney MA, Benezra A, Wissel E, Friedman M, DeAngelis KM, Robinson JM, Fahimipour AK, Manus MB, Grieneisen L, Dietz LG, Chauhan A, Pathak A, Kuthyar S, Stewart JD, Dasari MR, Nonnamaker E, Choudoir M, Horve PF, Zimmerman NB, Kozik AJ, Weatherford Darling K, Romero-Olivares AL, Hariharan J, Farmer N, Maki K, Collier JL, O'Doherty K, Letourneau J, Kline J, Moses PL, Mora N. Introducing the Microbes and Social Equity Working Group: Considering the Microbial Components of Social, Environmental, and Health Justice. *mSystems*. 2021 Aug 31;6(4):e0047121.
9. Doden HL, **Wolf PG**, Gaskins HR, Anantharaman K, Alves JMP, Ridlon JM. Completion of the gut microbial epi-bile acid pathway. *Gut Microbes*. 2021 Jan-Dec;13(1):1-20.
10. **Wolf PG**, Devendran S, Doden HL, Ly LK, Moore T, Takei H, Nittono H, Murai T, Kurosawa T, Chlipala GE, Green SJ, Kakiyama G, Kashyap P, McCracken VJ, Gaskins HR, Gillevet PM, Ridlon JM. Berberine alters gut microbial function through modulation of bile acids. *BMC Microbiol*. 2021 Jan 11;21:24.
11. **Wolf PG**, Gaskins HR, Ridlon JM, Freels S, Hamm A, Goldberg S, Petrilli P, Schering T, Vergis S, Gomez-Perez S, Yazici C, Braunschweig C, Mutlu E, Tussing-Humphreys L. Effects of taurocholic acid metabolism by gut bacteria: A controlled feeding trial in adult African American subjects at elevated risk for CRC. *Contemp Clin Trials Comm*. 2020 Jul 19:100611.
12. **Wolf PG**, Manero J, Harold KB, Chojnacki M, Kaczmarek J, Liguori C, Arthur A. Educational video intervention improves knowledge and self-efficacy in identifying malnutrition among healthcare providers in a cancer center: a pilot study. *Support Care Cancer*. 2020 Feb 1;28(2):683-9.
13. Ly L, Rowles J, Paul H, Alves JM, Yemm C, **Wolf PG**, Devendran S, Hudson M, Erdman J, Ridlon JM. Bacterial steroid-17,20-desmolase is a taxonomically rare enzymatic pathway that converts prednisone to 1,4-androstadiene-3,11,17-trione, a metabolite that causes proliferation of prostate cancer cells. *J Steroid Biochem Mol Biol*. 2019 Dec 20;199:105567.
14. Ridlon JM, Devendran S, Alves JM, Doden H, **Wolf PG**, Pereira GV, Ly L, Volland A, Takei H, Nittono H, Murai T, Kurosawa T, Chlipala GE, Green SJ, Hernandez AG, Fields CJ, Wright CL, Kakiyama G, Cann I, Kashyap P, McCracken V, Gaskins HR. The 'in vivo lifestyle' of bile acid 7 α -dehydroxylating bacteria: comparative genomics, metatranscriptomic, and bile acid metabolomics analysis of a defined microbial community in gnotobiotic mice. *Gut Microbes*. 2019 Jun 9:1-24.
15. Devendran S, Shrestha R, Alves JMP, **Wolf PG**, Ly L, Hernandez AG, Méndez-García C, Inboden A, Wiley J, Paul O, Allen A, Springer E, Wright CL, Fields CJ, Daniel SL, Ridlon JM. Clostridium scindens ATCC 35704: Integration of Nutritional Requirements, the Complete Genome Sequence, and Global Transcriptional Responses to Bile Acids. *Appl Environ Microbiol*. 2019 Mar 22;85(7).
16. **Wolf PG**, Yazici C, Kim H, Cross TL, Vermillion K, Carroll T, Augustus GJ, Mutlu E, Tussing-Humphreys L, Braunschweig C, Xicola RM, Jung B, Llor X, Ellis NA, Gaskins HR. Race-dependent association of sulfidogenic bacteria with colorectal cancer. *Gut*. 2017 Nov;66(11):1983-1994. **(Co-first authored)**
17. **Wolf PG**, Parthasarathy G, Chen J, O'Connor HM, Chia N, Bharucha AE, Gaskins HR. Assessing the colonic microbiome, hydrogenogenic and hydrogenotrophic genes, transit and breath methane in constipation. *Neurogastroenterol Motil*. 2017 Oct;29(10):1-9.
18. Shao YX, Lei Z, **Wolf PG**, Gao Y, Guo YM, Zhang BK. Zinc Supplementation, via GPR39, Upregulates PKC ζ to Protect Intestinal Barrier Integrity in Caco-2 Cells Challenged by *Salmonella enterica* Serovar Typhimurium. *J Nutr*. 2017 Jul;147(7):1282-1289.
19. Shao Y, **Wolf PG**, Guo S, Guo Y, Gaskins HR, Zhang B. Zinc enhances intestinal epithelial barrier function through the PI3K/AKT/mTOR signaling pathway in Caco-2 cells. *J Nutr Biochem*. 2017 May;43:18-26.
20. **Wolf PG**, Biswas A, Morales SE, Greening C, Gaskins HR. H2 metabolism is widespread and diverse among human colonic microbes. *Gut Microbes*. 2016 May 3;7(3):235-45.
21. Ridlon JM, **Wolf PG**, Gaskins HR. Taurocholic acid metabolism by gut microbes and colon cancer. *Gut Microbes*. 2016 May 3;7(3):201-15.
22. Parthasarathy G, Chen J, Chen X, Chia N, O'Connor HM, **Wolf PG**, Gaskins HR, Bharucha AE. Relationship Between Microbiota of the Colonic Mucosa vs Feces and Symptoms, Colonic Transit, and Methane Production in Female Patients with Chronic Constipation. *Gastroenterology*. 2016 Feb;150(2):367-79.
23. Baldwin J, Collins B, **Wolf PG**, Martinez K, Shen W, Chuang CC, Zhong W, Cooney P, Cockrell C, Chang E, Gaskins HR, McIntosh MK. Table grape consumption reduces adiposity and markers of hepatic lipogenesis and alters gut microbiota in butter fat-fed mice. *J Nutr Biochem*. 2016 Jan;27:123-35.

24. Shen W, **Wolf PG**, Carbonero F, Zhong W, Reid T, Gaskins HR, McIntosh MK. Intestinal and systemic inflammatory responses are positively associated with sulfidogenic bacteria abundance in high-fat-fed male C57BL/6J mice. *J Nutr.* 2014 Aug;144(8):1181-7.

AWARDS AND HONORS

Graduate Research Award- University of Illinois College of Agricultural, Consumer, and Environmental Sciences	April 2018
Finalist- ASN Emerging Leaders in Nutritional Science Poster Competition Experimental Biology	April 2017
Early Investigator Award- American Gastroenterological Association Digestive Disease Week	May 2015
List of Teachers Ranked as Excellent by Students FSHN 420- Nutritional Aspects of Disease, University of Illinois at Urbana Champaign	Fall 2013, Fall 2014

GRANTS AND FELLOWSHIPS

Loan Repayment Program Award National Cancer Institute Award Amount: \$39,828	November 2022-July 2024
Pathway to Independence Award- K99CA263172-01 (declined) National Cancer Institute Award Amount: \$974,024	August 2022
Postdoctoral Fellowship- (declined) American Cancer Society Award Amount: \$ 115,500	March 2022
Vision 20/20 Grant- University of Illinois at Urbana Champaign (MPI) Division of Nutritional Sciences Award Amount: \$21,400	September 2020- September 2022
Postdoctoral Fellowship- T32CA057699 Cancer Education and Career Development Program Award Amount: \$174,500 in salary, tuition, insurance support, and development funds	January 2019-present
Scholarship- NIAID/NCATS Keystone Symposia- Microbiome: Therapeutic Implications Award Amount: \$1,200	October 2019
Postdoctoral Travel Award- University of Illinois at Chicago Office of the Vice Chancellor for Research Award Amount: \$500	August 2019
Frank W. Kari Memorial Award- University of Illinois at Urbana Champaign Division of Nutritional Sciences Award Amount: \$800	January 2016
Graduate College Travel Award- University of Illinois at Urbana Champaign The Graduate College Award Amount: \$300	January 2016
Margin of Excellence Travel Grant- University of Illinois at Urbana Champaign Division of Nutritional Sciences Award Amount: \$300, \$500	March 2016, March 2015
Toshiro Nishida Research Award- University of Illinois at Urbana Champaign Division of Nutritional Sciences	January 2015

Award Amount: \$750

Margin of Excellence Research Grant- University of Illinois at Urbana Champaign (PI)

April 2015, April 2014

Division of Nutritional Sciences

Award Amount: \$3150, \$2100

INVITED TALKS

Microbes and Social Equity Speaker Series, University of Maine

February 2022

Nutrition, Microbial Metabolites, and Cancer Disparities

Department of Nutrition Science, Purdue University

January 2022

Nutrition, Microbial Metabolites, and Cancer Disparities

Division of Food, Nutrition, and Exercise Science, University of Missouri

January 2022

Nutrition, Microbial Metabolites, and Cancer Disparities

Department of Nutrition, Texas A&M

November 2021

Nutrition, Microbial Metabolites, and Cancer Disparities

Microbes and Social Equity Virtual Symposium, University of Maine

June 2021

Social and Environmental Stress

Illinois Association of Free and Charitable Clinics Annual Conference

April 2021

Medical Nutrition Therapy in the Free Clinic: Using Nutrition Education to Mitigate Health Disparities

Medical Social Equity Initiative, University of Illinois at Chicago

October 2020

Health Equity Panelist

Department of Kinesiology and Community Health, University of Illinois

November 2019

Microbial Amino Acid Metabolism and Gut Health

International FISH course, University of Vienna

February 2016

Exploring microbial interactions between 7 α -dehydroxylating and sulfidogenic bacteria using fluorescence in situ hybridization

CONFERENCE ACTIVITY

CONFERENCES/SYMPOSIA ORGANIZED

Microbes and Social Equity Virtual Symposium, University of Maine

June 2021

Role: Co-Organizer and Session Leader on Social and Environmental Stress

Annual Nutrition Symposium

April 2016

Role: Acquired \$1,293.75 of funds toward event

ORAL PRESENTATIONS

Wolf PG, Devendran S, Doden HL, Ly LK, Moore T, Takei H, Nittono H, Murai T, Kurosawa T, Chlipala GE, Green SJ, Kakiyama G, Kashyap P, McCracken VJ, Gaskins HR, Gillevet PM, Ridlon JM. Network modeling of bile acid metabolomics and cecal bacterial metatranscriptomic responses to berberine in a gnotobiotic mouse model constituted with the B4PC2 human microbial consortium. *Keystone Symposium- Microbiome: Therapeutic Implications*. October 2019.

Wolf PG, Yazici C, Kim H, Liu T, Carroll T, Augustus GJ, Mutlu E, Tussing-Humphreys L, Braunschweig C, Xicola RM, Jung B, Llor X, Ellis NA, Gaskins HR. Race-dependent Association of Sulfidogenic Bacteria with Colorectal Cancer. *FASEB J* April 2017 31:315.2

Wolf PG, Chia N, Gaskins HR, Bharucha AE. Colonic microbes contributing to hydrogen generation and utilization correlate with breath methane and functional symptoms in patients with chronic constipation and constipation predominant irritable bowel syndrome. *Gastroenterology* 2015 April. 148(4):S-21-S-22

POSTER PRESENTATIONS

Wolf PG, Kolossov V, Zhou Z, Ly L, Doden H, Devendran S, Breister A, Lucio L, Polak P, Matatov M, Anantharaman K, Ridlon JM, Gaskins HR. The colorectal cancer associated microbe *Odoribacter splanchnicus* produces genotoxic hydrogen sulfide via cysteine metabolism [abstract]. *Dr. Gary Kruh Cancer Research Symposium*. April 2021.

Wolf PG, Kolossov V, Zhou Z, Ly L, Doden H, Devendran S, Breister A, Lucio L, Polak P, Matatov M, Anantharaman K, Ridlon JM, Gaskins HR. The colorectal cancer associated microbe *Odoribacter splanchnicus* produces genotoxic hydrogen sulfide via cysteine metabolism [abstract]. In: Proceedings of the Annual Meeting of the American Association for Cancer Research 2020; 2020 Apr 27-28 and Jun 22-24. Philadelphia (PA): AACR; *Cancer Res* 2020;80(16 Suppl): Abstract nr 3342.

Wolf PG, Devendran S, Doden HL, Ly LK, Moore T, Takei H, Nittono H, Murai T, Kurosawa T, Chlipala GE, Green SJ, Kakiyama G, Kashyap P, McCracken VJ, Gaskins HR, Gillevet PM, Ridlon JM. Network modeling of bile acid metabolomics and cecal bacterial metatranscriptomic responses to berberine in a gnotobiotic mouse model constituted with the B4PC2 human microbial consortium. *Microbial Early-career Researchers Association (μERA) Research Symposium*. September 2019.

Wolf PG, Cummings P, Shah N, Gaskins HR and Mutlu E. Sulfidogenic bacteria abundance in colonic mucosa is positively correlated with milk and animal fat intake and negatively correlated with mono and polyunsaturated fatty acids. *FASEB J* 2015 April. 29:598.10

MENTORING EXPERIENCE

Committee Member

Nate Willis, PhD Student- University of Illinois

Spring 2021-current

Hanna Hindt, Masters Student- Rush University Medical Center

Fall 2019-Fall 2020

Dietetics Student Mentor- Champaign County Christian Health Center

Lauren Thomas, Undergraduate Student

Fall 2019

Debby Liu, Undergraduate Student

Fall 2019

Judith Wen, Undergraduate Student

Summer 2019

Research Mentor- University of Illinois at Urbana Champaign

Emily Beach, Undergraduate Student

Fall 2021-Present

Sri Meddakar, Undergraduate Student

Fall 2021-Present

Taryn Melvin, Undergraduate Student

Fall 2021-Present

Maria Stipes, Undergraduate Student

Fall 2021-Present

Briawna Binion, Graduate Student

Fall 2019-Present

Hanchu Dai, Graduate Student

Fall 2019-Present

Madison Boissiere, Undergraduate Student

Fall 2019-Spring 2021

Emily Siebert, Undergraduate Student

Spring 2020

Jenny Hong, Undergraduate Student

Fall 2019-Spring 2020

Luke Lucio, Undergraduate Student

Fall 2018-Summer 2020

Paige Polak, Undergraduate Student

Summer 2018-Spring 2019

Karin Vermillion, Lab Technician

Fall 2014-Spring 2016

Allison Phillips, Undergraduate Student

Fall 2013-Fall 2014

ResearchStart Summer Program Mentor- University of Illinois at Urbana Champaign

Erica Guelfi, High School Student

Summer 2019

James Scholar Program Mentor- University of Illinois at Urbana Champaign

Sarah Matatov, Undergraduate Student

Summer 2019-Summer 2021

Hannah Rumbold, Undergraduate Student

Spring 2020

Loralee Wilson, Undergraduate Student

Fall 2015-Spring 2018

Adam Burns, Undergraduate Student

Fall 2015-Spring 2016

Ann Gonnering, Undergraduate Student

Fall 2014-Spring 2016

Gabriel Manning, Undergraduate Student

Summer 2014-Fall 2015

International Summer Immersion Program Mentor- University of Illinois at Urbana Champaign

Cong Li, Undergraduate Student

Summer 2018

Visiting Scholar China Agricultural University Mentor- University of Illinois at Urbana Champaign

Yuxin Shao, PhD Student

Fall 2015-Summer 2016

Research Apprentice Program Mentor- University of Illinois at Urbana Champaign

Ja'lia Sheppard, High School Student- Distinguished Scholarship, Outstanding Poster and Presentation. Summer 2014

UIUC- Zhejiang University Apprenticeship Program Mentor- University of Illinois at Urbana Champaign

Siyu Li, Undergraduate Student Summer 2014

Summer Research Opportunities Program Mentor- University of Illinois at Urbana Champaign

Edwin Pacheco, Undergraduate Student- honorable mention for Outstanding Oral Presentation Summer 2013

TEACHING EXPERIENCE

Guest Lecturer- University of Illinois at Chicago

ResearchHStart Program Summer 2021

Guest Lecturer- University of Illinois at Urbana-Champaign

ANSCI 350- Cellular Metabolism in Animals, University of Illinois Fall 2019, Fall 2020

FSHN 420- Nutritional Aspects of Disease Fall 2013, Fall 2014

PROFESSIONAL MEMBERSHIPS AND SERVICE

At-Large Delegate- Early Career Nutrition Interest Group

July 2022-July 2024

American Society for Nutrition

Member

Microbes and Social Equity Working Group 2021-Present

American Association for Cancer Research 2019-Present

Academy of Nutrition and Dietetics 2016-Present

American Society for Nutrition 2014-Present

American Society for Microbiology 2014-Present

Reviewer

Nutrition Research 2022-Present

Frontiers in Nutrition (Review Editor) 2022-Present

Applied Environmental Microbiology 2021-Present

Microorganisms 2021-Present

Microbiome 2021-Present

Gut Microbes 2019-2020

mSystems 2019-2020

PLOS One 2019-2020

FEMS Microbiology Ecology 2016-2017

INDUSTRY EXPERIENCE AND COMMUNITY SERVICE

Champaign County Christian Health Center

Clinic Dietitian April 2019-Present

Triage Team Leader/Volunteer August 2008- February 2014

Nutritional Sciences Graduate Student Association

Steering Committee Treasurer/Co-treasurer September 2014- September 2016

Twin City Derby Girls- Non-Profit Sports League

Board Member January 2013- January 2016

Conair Corporation

Microbiologist December 2007- January 2013

Vector Production Facility, IU School of Medicine

Lab Technician April 2007-December 2007

Diamond Foods
Quality Assurance Technician

September 2006-September 2008