Paniz Jasbi, PhD

Postdoctoral Research Scholar

Center for Applied Structural Discovery/Center for Personalized Diagnostics, Biodesign Institute School of Molecular Sciences, Arizona State University

> 850 N 5th St, Phoenix, AZ 85004 +1 (602) 502-7346 pjasbi@asu.edu **⊠**<u>Google Scholar Profile</u>

EDUCATION

Arizona State University, Phoenix — Ph.D. Exercise and Nutritional Sciences

- Dissertation chairs: Haiwei Gu, PhD (2018—2022) and Carol S. Johnston, PhD (2021-2022)
- Dissertation title: "Mass Spectrometry-based Metabolomics: Considerations for Laboratory Testing"
- GPA: 4.00
- Graduation date: May 9, 2022

Arizona State University, Phoenix — M.S. Obesity Prevention and Management

- Thesis chairs: Elizabeth D. Phillips, PhD (2016—2017) and Carol S. Johnston, PhD (2017-2018)
- Thesis title: "Fat as a Basic Taste: CD36 and its Role in Fat Taste"
- GPA: 4.00
- Graduation date: May 7, 2018

Arizona State University, Tempe — B.S. Psychological Science (Philosophy minor)

- Research mentor: Elizabeth D. Phillips, PhD
- Summa cum Laude
- GPA: 4.00
- Graduation date: May 11, 2015

PROFESSIONAL APPOINTMENTS

- Postdoctoral Research Scholar (May 2018 Present) School of Molecular Sciences, Arizona State University
 - o Postdoctoral advisor: Judith Klein-Seetharaman, PhD
- **Graduate Teaching Associate** (August 2018 May 2022) College of Health Solutions, Arizona State University
 - Courses taught: Nutrition Therapies for Eating Disorders and Substance Use Disorder, Nutrition Focused Physical Assessment, Applied Project I, Applied Project II, Human Nutrition, Advanced Human Metabolism I, Advanced Human Metabolism II
- **Graduate Research Associate** (June 2018 August 2021) Arizona Metabolomics Laboratory, Arizona State University
- **Graduate Research Assistant** (August 2016 May 2018) Conditioned Food Preferences Laboratory, Arizona State University
- Laboratory Manager (August 2015 July 2016) Conditioned Food Preferences Laboratory, Arizona State University
- Undergraduate Research Assistant (January 2015 July 2015) Conditioned Food Preferences Laboratory, Arizona State University
 - Courses taught: Physiological Psychology

CONSULTING

 Nafisa Jadavji, Midwestern University (August 2022 — Present): Untargeted fecal analysis of aqueous metabolites in mice.

PEER-REVIEWED PUBLICATIONS

Years active: 2019—2022, total citations = 369, h-index = 12, i10-index = 14

 AE Mohr, <u>P Jasbi</u>, DA Bowes, B Dirks, CM Whisner, KM Arciero, M Poe, H Gu, E Gumpricht, KL Sweazea, PJ Arciero, **2022**. Exploratory analysis of one versus twoday intermittent fasting protocols on the gut microbiome and plasma metabolome in adults with overweight/obesity. *Frontiers in Nutrition*, In press.
 Contributions: methodology software formal analysis investigation data curation

<u>Contributions:</u> methodology, software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization

 H He, T Pan, X Shi, S Yang, <u>P Jasbi</u>, Y Jin, JY Cui, H Gu, **2022**. Tetrabromobisphenol A induces tricarboxylic acid cycle and alanine, aspartate and glutamate metabolism pathway alterations in human lung epithelial A549 cells. *Environmental Toxicology*, 1– 10.

Contributions: investigation, writing-original draft, writing-review & editing

 AJ Roeder, MA Koehler, <u>P Jasbi</u>, D McKechnie, J Vanderhoof, BA Edwards, MJ Gonzalez-Moa, A Seit-Nebi, SA Svarovsky, DF Lake, **2022**. Longitudinal comparison of neutralizing antibody responses to COVID-19 mRNA vaccines after second and third doses. *Vaccines*, *10*(9), 1459.

<u>Contributions</u>: methodology, software, formal analysis, data curation, writing-original draft, visualization

 AE Mohr, <u>P Jasbi*</u>, KB Vander Wyst, I van Woerden, X Shi, H Gu, CM Whisner, M Bruening, **2022**. Association of food insecurity on gut microbiome and metabolome profiles in a diverse college-based sample. *Scientific Reports*, *12*(1), 1—16.
 *Co-first author

<u>Contributions:</u> methodology, software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization

J Poole, <u>P Jasbi*</u>, AS Pascual, S North, N Kwatra, V Weissig, H Gu, T Bottiglieri, NM Jadavji, **2022**. Ischemic stroke and dietary vitamin B12 deficiency in old-aged females: impaired motor function, increased ischemic damage size, and changed metabolite profiles in brain and cecum tissue. *Nutrients*, *14*, 2960.
 *Co-first author

<u>Contributions:</u> formal analysis, investigation, writing-original draft, writing-review & editing, visualization

 DF Lake, AJ Roeder, MJ Gonzalez-Moa, M Koehler, E Kaleta, <u>P Jasbi</u>, J Vanderhoof, D McKechnie, J Forman, B Edwards, A Seit-Nebi, S Svarovsky, **2022**. Third COVID-19 vaccine dose boosts neutralising antibodies in poor responders. *Communications Medicine*, *2*, 85.

<u>Contributions:</u> software, formal analysis, data curation, visualization

- AE Mohr, M Crawford, <u>P Jasbi</u>, S Fessler, K Sweazea, **2022**. Lipopolysaccharide and the gut microbiota: Considering structural variation. *FEBS Letters*, 596(7), 849—875. <u>Contributions:</u> conceptualization, writing-original draft, visualization
- 8. <u>P Jasbi</u>, AE Mohr, X Shi, T Mahmood, Q Zhu, M Bruening, C Whisner, H Gu, **2022**. Microbiome and metabolome profiles of high screen time in a cohort of healthy college students. *Scientific Reports*, *12*(1), 1—17.

<u>Contributions:</u> conceptualization, methodology, software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization, funding acquisition CS Johnston, <u>P Jasbi</u>, Y Jin, S Bauer, S Williams, SN Fessler, H Gu, **2021**. Daily vinegar ingestion improves depression scores and alters the metabolome in healthy adults: A randomized controlled trial. *Nutrients*, *13*(11), 4020.

<u>Contributions:</u> software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization

- DF Lake, AJ Roeder, E Kaleta, <u>P Jasbi</u>, K Pfeffer, C Koelbel, S Periasamy, N Kuzmina, A Bukreyev, TE Grys, L Wu, JR Mills, McAulay, M Gonzalez-Moa, A Seit-Nebi, S Svarovsky, **2021**. Development of a rapid point-of-care test that measures neutralizing antibodies to SARS-CoV-2. *Journal of Clinical Virology*, *145*, 105024. <u>Contributions:</u> methodology, software, validation, formal analysis, data curation, writing-original draft, writing-review & editing, visualization
- 11. <u>P Jasbi</u>, X Shi, P Chu, N Elliot, H Hudson, D Jones, G Serrano, B Chow, TG Beach, L Liu, G Jentarra, H Gu, **2021**. Metabolic profiling of neocortical tissue discriminates Alzheimer's disease from mild cognitive impairment, high pathology controls, and normal controls. *Journal of Proteome Research*, 20(9), 4303–4317. <u>Contributions:</u> conceptualization, methodology, software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization
- 12. Y Wei, <u>P Jasbi*</u>, X Shi, C Turner, J Hrovat, L Liu, Y Rabena, P Porter, H Gu, **2021**. Early breast cancer detection using untargeted and targeted metabolomics. *Journal of Proteome Research*, *20*(6), 3124—3133.

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*Co-first author
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<u>Contributions:</u> conceptualization, methodology, software, validation, formal analysis, data curation, writing-original draft, writing-review & editing, visualization, supervision

- A Bapat, N Schippel, X Shi, <u>P Jasbi</u>, H Gu, M Kala, A Sertil, S Sharma, **2021**. Hypoxia promotes erythroid differentiation through the development of progenitors and proerythroblasts. *Experimental Hematology*, *97*, 32—46 (e35). <u>Contributions:</u> software, formal analysis, investigation, data curation, writing-original draft, visualization
- 14. AJ Basile, AE Mohr, <u>P Jasbi</u>, H Gu, P Deviche, KL Sweazea, **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: Molecular & Integrative Physiology*, 251, 110820.

<u>Contributions</u>: software, formal analysis, investigation, data curation, writing-original draft, visualization

 S Anderson, LA Gonzalez, <u>P Jasbi</u>, CS Johnston, **2020**. Evidence that daily vinegar ingestion may contribute to erosive tooth wear in adults. *Journal of Medicinal Food*, 24(8), 894—896.

Contributions: investigation, data curation

 X Shi, B Xi, <u>P Jasbi</u>, C Turner, Y Jin, H Gu, **2020**. Comprehensive isotopic targeted mass spectrometry: Reliable metabolic flux analysis with broad coverage. *Analytical Chemistry*, 92 (17), 11728—11738.

Contributions: writing-original draft, writing-review & editing

17. AJ Basile, <u>P Jasbi*</u>, W Clark, X Shi, H Gu, P Deviche, KL Sweazea, **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: Molecular & Integrative Physiology*, 247, 110718. *Co-first author

<u>Contributions</u>: software, validation, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization, supervision

- 18. D Gutierrez, A Weinstock, VC Antharam, H Gu, <u>P Jasbi</u>, X Shi, B Dirks, R Krajmalnik-Brown, J Maldonado, J Guinan, S Thangamani, **2019**. Antibiotic-induced gut metabolome and microbiome alterations increase the susceptibility to *Candida albicans* colonization in the gastrointestinal tract. *FEMS Microbiology Ecology*, *96*(1), fiz187. <u>Contributions:</u> software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization
- <u>P Jasbi</u>, O Baker, X Shi, L Gonzalez, S Wang, S Anderson, B Xi, H Gu, CS Johnston, 2019. Daily red wine vinegar ingestion for eight weeks improves glucose homeostasis and affects the metabolome but does not reduce adiposity in adults. *Food & Function*, 10, 7343-7355.

<u>Contributions:</u> conceptualization, methodology, software, formal analysis, investigation, data curation, writing-original draft, writing-review & editing, visualization

 X Wang, H Gu, SA Palma-Duran, A Fierro, <u>P Jasbi</u>, X Shi, W Bresette, N Tasevska, **2019**. Influence of storage conditions and preservatives on metabolite fingerprints in urine. *Metabolites*, 9(10), 203.
 Contributions: validation, investigation, writing-original draft, writing-review & editing.

<u>Contributions:</u> validation, investigation, writing-original draft, writing-review & editing, visualization, supervision

 X Shi, S Wang, <u>P Jasbi</u>, C Turner, J Hrovat, Y Wei, J Liu, H Gu, **2019**. Databaseassisted globally optimized targeted mass spectrometry (dGOT-MS): Broad and reliable metabolomics analysis with enhanced identification. *Analytical Chemistry*, *91*(21), 13737—13745.

Contributions: software, writing-original draft, writing-review & editing, visualization

 P Jasbi, NM Mitchell, X Shi, TE Grys, Y Wei, L Liu, DF Lake, H Gu, 2019. Coccidioidomycosis detection using targeted plasma and urine metabolic profiling. *Journal of Proteome Research*, 18(7), 2791—2802.
 <u>Contributions:</u> conceptualization, methodology, software, formal analysis, investiga-

tion, data curation, writing-original draft, writing-review & editing, visualization

- Q Fei, D Wang, <u>P Jasbi</u>, P Zhang, GA Nagana Gowda, D Raftery, H Gu, **2019**. Combining NMR and MS with chemical derivatization for absolute quantification with reduced matrix effects. *Analytical Chemistry*, 91(6), 4055–4062.
- <u>Contributions:</u> validation, writing-original draft, writing-review & editing, supervision
 24. <u>P Jasbi</u>, D Wang, SL Cheng, Q Fei, JY Cui, L Liu, Y Wei, D Raftery, H Gu, **2019**. Breast cancer detection using targeted plasma metabolomics. *Journal of Chromatog-raphy B*, *1105*, 26–37.

<u>Contributions</u>: conceptualization, methodology, software, validation, formal analysis, data curation, writing-original draft, writing-review & editing, visualization

MANUSCRIPTS IN REVIEW/REVISION

- 1. MHS Murthy, <u>P Jasbi</u>, W Vizgaudis, L Kumar, Y Tran, M Olaosebikan, L Roger, J Yang, N Lewinski, N Daniels, L Cowen, J Klein-Seetharaman. Insulin signaling and pharmacology in humans and corals. Submitted to: *Drug Discovery Today*.
- AJ Roeder, MA Koehler, S Svarovsky, <u>P Jasbi</u>, A Seit-Nebi, MJ Gonzalez-Moa, J Vanderhoof, D McKechnie, BA Edwards, DF Lake. SARS-CoV-2 Omicron variant infection of individuals with high titer neutralizing antibodies post-3rd mRNA vaccine dose. Submitted to: *The Lancet Infectious Diseases*.
- 3. <u>P Jasbi</u>, J Patterson, Y Jin, J Nikolich, K Knox, G Weinstock, P Smith, HL Twigg III, H Gu. Targeted metabolomics reveals plasma biomarkers and metabolic alterations of the aging process in healthy young and older adults. Submitted to: *Nature Aging*.
- 4. F Bellerba, AC Chatziioannou, <u>P Jasbi</u>, N Robinot, P Keski-Rahkonen, A Trolat, B Vozar, S Hartman, A Scalbert, B Bonanni, H Johansson, D Sears, S Gandini. Metabolomic profiles of metformin treatment in breast cancer survivors. Submitted to: *Clinical Cancer Research*.

MANUSCRIPTS IN PREPARATION

1. <u>P Jasbi</u>, H Gu. Mass Spectrometry-based metabolomics: Considerations for laboratory testing.

PEER-REVIEWED BOOK CHAPTERS

- 1. H Gu, <u>P Jasbi</u>, J Patterson, Y Jin. Enhanced detection of short-chain fatty acids using gas chromatography-mass spectrometry. In *Current Protocols*, **2021**. *1* (6) e177.
- 2. H Gu, X Shi, <u>P Jasbi</u>, J Patterson. Metabolomics analysis of viral therapeutics. In *Viruses as Therapeutics*, **2020**. 179-197. Humana, New York, NY.

PATENTS

 DF Lake, H Gu, TE Grys, NE Mitchell, <u>P Jasbi</u>, Mayo Foundation for Medical Education and Arizona Board of Regents of ASU, **2021**. Biomarkers for detection and treatment assessment of infectious diseases and disorders. U.S. Patent Application 16/992,247. Publication of US20210048428A1.

ORAL PRESENTATIONS

- 1. Title: <u>Microbiome and Metabolome Profiles of High Screen Time in a Cohort of College</u> <u>Students</u>
 - 14th Annual Meeting of the Arizona Physiological Society (Regional)
 - October 29, **2021** (Glendale, AZ)
- 2. Title: <u>A Brain Tissue Metabolomic Signature Discloses Alzheimer's Disease Post-Mortem</u>
 - o 12th Annual Meeting of the Arizona Physiological Society (Regional)
 - November 2, **2019** (Tempe, AZ)
- 3. Title: <u>Accurate Coccidioidomycosis Detection Using Targeted Plasma and Urine Met-abolic Profiling</u>
 - o 63rd Annual Meeting of the Coccidioidomycosis Study Group (International)
 - April 6, 2019 (Sacramento, CA)
- 4. Title: Breast Cancer Detection Using Targeted Plasma Metabolic Profiling
 - 66th Annual ASMS Conference on Mass Spectrometry and Allied Topics (National)
 - June 7, **2018** (San Diego, CA)
- 5. Title: Introduction to Mass Spectrometry
 - o 1st Annual Symposium of the Arizona Metabolomics Laboratory (Regional)
 - March 16, 2018 (Scottsdale, AZ)

POSTER PRESENTATIONS

- 1. J Poole, <u>P Jasbi</u>, AS Pascual, S North, N Kwarta, V Weissig, H Gu, NM Jadavji. Reduced stroke outcome in old-aged female mice maintained on a dietary vitamin B12 deficiency. Kenneth A. Suarez Research Day (Glendale, AZ), **2022**.
- J Fowler, <u>P Jasbi</u>, R Moore, K Bear. Effects of acidified liquid fortifier vs. non-acidified liquid fortifier on growth and metabolic acidosis in preterm infants: A retrospective study. Nutrition Science & Practice Conference (Seattle, WA), **2022**.
- J Patterson, <u>P Jasbi</u>, Y Jin, J Nikolich, K Knox, G Weinstock, P Smith, HL Twigg III, H Gu. Targeted metabolomics reveals plasma biomarkers and metabolic alterations of the aging process in healthy young and older adults. Experimental Biology (Philadelphia, PA), **2022**.
- N Schippel, A Bapat, X Shi, <u>P Jasbi</u>, H Gu, M Kala, A Sertil, S Sharma. Enhanced myelo-erythroid differentiation of human hematopoietic stem and progenitor cells in a low oxygen environment. Annual Scientific Meeting of the International Society for Experimental Hematology (Online), **2021**.

- 5. J Patterson, <u>P Jasbi</u>, H Twigg, H Gu. Targeted metabolomics reveals plasma biomarkers and metabolic alterations of the aging process in healthy young and older adults. Annual Meeting of the Arizona Physiological Society (Glendale, AZ), **2021**.
- <u>P Jasbi</u>, X Shi, P Chu, N Elliot, H Hudson, D Jones, G Serrano, B Chow, TG Beach, L Liu, G Jentarra, H Gu. Metabolic profiling of neocortical tissue discriminates Alzheimer's disease from mild cognitive impairment, high pathology controls, and normal controls. Annual Meeting of the Arizona Alzheimer's Consortium (Tucson, AZ), **2021**.
- 7. P Lu, SY Wong, J Chai, <u>P Jasbi</u>, L Wu, Y Lyu, M Tang, B Smith, E. Lucas, SL Clarke, W Chowanadisai, X Shen, H He, J Zhao, H Gu, T Conway, A Wyss, D Lin. Zeaxanthin drives dynamic changes in the mouse metabolome through gut microbiome shift. Nutrition (Online), **2021**.
- 8. <u>P Jasbi</u>. Metabolic profiling for early breast cancer. College of Health Solutions Student Research Symposium (Online), **2021**.
- 9. <u>P Jasbi</u>. Early breast cancer detection using non-targeted and targeted metabolomics. Annual Meeting of the Arizona Physiological Society (Online), **2020**.
- 10. C Turner, <u>P Jasbi</u>, X Shi, S Atlas, Y Wei, H Gu. Ovarian cancer detection using targeted plasma metabolic profiling. Experimental Biology (San Diego, CA), **2020**.
- 11. <u>P Jasbi</u>, X Shi, C Turner, G Jentarra, H Gu. A brain tissue metabolomic signature discloses Alzheimer's disease post-mortem. Experimental Biology (San Diego, CA), **2020**.
- 12. R Eghlimi, X Shi, <u>P Jasbi</u>, J Hrovat, H Gu. Triple negative breast cancer detection using targeted lipidomics. Annual Meeting of the Arizona Physiological Society (Tempe, AZ), **2019**.
- Y Wei, <u>P Jasbi</u>, X Shi, H Gu. Ovarian cancer detection using plasma metabolic profiling. Annual Meeting of the American Society for Mass Spectrometry (Atlanta, GA), 2019.
- <u>P Jasbi</u>, O Baker, X Shi, L Gonzalez, S Anderson, X Wang, H Gu, C Johnston. Effects of daily vinegar ingestion on insulin sensitivity, visceral fat, body weight and the metabolome in healthy adults. Annual Meeting of the American Society for Mass Spectrometry (Atlanta, GA), **2019**.
- X Shi, H Gu, <u>P Jasbi</u>. Database-assisted globally tptimized targeted mass spectrometry (dGOT-MS): Reliable metabolomics analysis with broad coverage. Annual Meeting of the American Society for Mass Spectrometry (Atlanta, GA), **2019**.
- 16. <u>P Jasbi</u>, N Mitchell, X Shi, T Grys, Y Wei, L Liu, D Lake, H Gu. Coccidioidomycosis detection using targeted plasma and urine metabolic profiling. Annual Meeting of the American Society for Mass Spectrometry (Atlanta, GA), **2019**.
- 17. W Bresette, J Hrovat, X Shi, J Liu, <u>P Jasbi</u>, H Gu. Sulforaphane increases renal cancer proliferation: A metabolomic analysis. College of Health Solutions Student Research Symposium (Phoenix, AZ), **2019**.
- 18. H Gu, Y Wei, <u>P Jasbi</u>, X Shi. Ovarian cancer detection using plasma metabolic profiling. Experimental Biology (Orlando, FL), **2019**.
- 19. H Gu, <u>P Jasbi</u>, N Mitchell, X Shi, T Grys, Y Wei, L Liu, D Lake. Coccidioidomycosis detection using targeted plasma and urine metabolic profiling. Experimental Biology (Orlando, FL), **2019**.
- A Basile, X Shi, <u>P Jasbi</u>, H Gu, P Deviche, K Sweazea. Mourning Doves, *Zenaida macroura*, are resistant to metabolic effects of a high fat diet. Experimental Biology (Orlando, FL), **2019**.
- <u>P Jasbi</u>, N Mitchell, T Grys, D Lake, H Gu. Coccidioidomycosis detection using targeted plasma and urine metabolic profiling. Annual Meeting of the Arizona Physiological Society (Tempe, AZ), 2018.

- 22. X Wang, N Tasevska, H Gu, S Duran, J Liu, X Shi, <u>P Jasbi</u>, W Bresette, B Chow, T Siragusa. Influence of storage conditions and preservatives on metabolite fingerprints in urine. Annual Meeting of the Arizona Physiological Society (Tempe, AZ), **2018**.
- 23. <u>P Jasbi</u>, D Wang, D Du, Q Fei, D Raftery, H Gu. Breast cancer detection using targeted plasma metabolic profiling. Metabolomics Society Conference (Seattle, WA), **2018**.
- 24. <u>P Jasbi</u>, H Gu. Breast cancer detection using targeted plasma metabolic profiling. Molecular, Cellular and Tissue Bioengineering Symposium (Tempe, AZ), **2018**.

MEDIA COVERAGE

1. S Seckel. Study: Too much screen time harmful on molecular level. *ASU News*. **2022**. https://news.asu.edu/20220308-discoveries-study-too-much-screen-time-harmful-molecular-level

TEACHING EXPERIENCE

1. Graduate Teaching Associate; Arizona State University; Phoenix; Fall 2018— Spring 2022

Course: NTR 441/541 (Advanced Human Metabolism II) Students learn macronutrient digestion, absorption, metabolism, and apply this knowledge in clinical and health promotion settings. Course content is centered on concepts of energy balance regarding weight gain and loss, as well as the interaction of nutrients in the human body and the factors that govern macronutrient requirements. Course requirements include locating and interpreting relevant literature in addition to demonstrating satisfactory written communication.

2. Graduate Teaching Associate; Arizona State University; Phoenix; Fall 2018— Spring 2022

Course: NTR 440/540 (Advanced Human Metabolism I) Knowledge obtained in this course will involve the integration of physiology, chemistry, biochemistry, biology, and nutrition to understand metabolic reactions and the regulation of micronutrients. The primary objective of this course is to apply these concepts to human nutrition as they relate to health and disease while emphasizing current findings in scientific literature. Instruction focuses on specific metabolic roles of vitamins and minerals, assessment of micronutrient status, correlated symptoms of deficiency and toxicity, as well as etiology of disease related to nutriture and targeted nutritional interventions to address imbalances.

3. Graduate Teaching Associate; Arizona State University; Online; Summer 2021 Course: NTR 241 (Human Nutrition)

Undergraduate course which introduces nutritional concepts with an emphasis on evidenced-based guidelines and practices. Students explore the macronutrients and micronutrients in food, how these nutrients are utilized by the body and their effect on overall health and disease. Also discusses what makes a 'healthy diet,' dietary eating patterns, energy balance and body weight. Students learn techniques to assess the credibility of nutrition information in the media, on the internet, and in scientific journals. Additional topics also include cultural aspects of food, food sustainability, and food safety.

4. Graduate Teaching Associate; Arizona State University; Online; Summer 2020 and 2021

Course: NTR 593b (Applied Project II)

Graduate students complete the final part of their applied project (i.e., original research, systematic review, educational materials) including results, discussion, conclusions, and applications. At the completion of the course, students can analyze collected data, accurately convey the results of their data analysis, discuss the implications of their findings as they relate to the research question, and discuss real-world applications of their findings.

5. Graduate Teaching Associate; Arizona State University; Online; Summer 2020 and 2021

Course: NTR 593a (Applied Project I)

Graduate students write and conduct the first part of their applied project which includes the introduction, review of literature, and methods. At the completion of the course, students can define their research question regarding population, intervention, comparison, and outcome, design methods to answer the research question, as well as articulate an evidence-based solution to the research question.

6. **Graduate Teaching Associate; Arizona State University; Online; Summer 2020** *Course: NTR 598 (Nutrition Focused Physical Assessment)*

Graduate course designed to educate students on evidence-based information needed to perform a comprehensive nutrition-focused physical examination on a patient, empowering the student to accurately identify and determine proper nutritional diagnosis, such as malnutrition.

7. Graduate Teaching Associate; Arizona State University; Online; Summer 2020 Course: NTR 598 (Nutrition Therapies for Eating Disorders and Substance Use Disorder)

Graduate course in which students describe the history of diet culture, identify key professionals of the treatment team and their roles, evaluate specific medical risk factors leading to disordered eating or substance use, and assess relevant literature to determine appropriate evidenced-based nutritional interventions and treatment techniques.

8. Undergraduate Teaching Assistant; Arizona State University; Tempe; Spring 2015

Course: PSY 325 (Physiological Psychology)

Undergraduate course focusing on the relationships of physiological processes to behavior. Emphasizes nervous system functioning and covers topics ranging from neuroanatomy to psychopharmacology.

MENTORING EXPERIENCE

1. Jeffrey Patterson, Graduate Student (MS), College of Health Solutions, Arizona State University (Summer 2021)

2. Cassidy Turner, Undergraduate Student (BS), School of Life Sciences, Arizona State University (Fall 2018—Spring 2020) *Current status: Medical Student at Arizona College of Osteopathic Medicine, Midwest*-

Current status: Medical Student at Arizona College of Osteopathic Medicine, Midwestern University

- o See Shi et al. Analytical Chemistry **2019**, 91(21), 13737—13745.
- See Shi et al. *Analytical Chemistry* **2020**, 92(17), 11728–11738.
- See Wei et al. Journal of Proteome Research 2021, 20(6), 3124–3133.
- 3. Ryan Eghlimi, Undergraduate Student (BS), School of Life Sciences, Arizona State University (Fall 2019 and Spring 2020)

Current status: Medical Student at Mayo Clinic Alix School of Medicine

• See Eghlimi et al. J. Proteome Res. **2020**, 19(6), 2367–2378.

4. Jon Hrovat, Undergraduate Student (BS), Barrett (The Honors College), Arizona State University (Fall 2018 and Spring 2019)

Current status: Medical Student at Arizona College of Osteopathic Medicine, Midwestern University • See Hrovat & Bresette. LC-MS/MS Analysis of Renal Cell Carcinoma Treated with Sulforaphane. *Arizona State University Press*, **2019**.

SERVICE TO SCHOLARSHIP

- Publication reviewer for:
 - Journal of Chromatography B (2019—Present)
 - Analytical Chemistry (2019—Present)
 - Scientific Reports (2022—Present)
 - International Journal of Environmental Research and Public Health (2022— Present)
 - BMC Pediatrics (2022—Present)
 - Healthcare (2022—Present)
 - o Metabolites (2022—Present)
 - o International Journal of Molecular Sciences (2022—Present)
 - *Biomolecules* (2022—Present)
 - *Molecules* (2022—Present)
 - Nutrition & Metabolism (2022—Present)
 - *Biomedicines* (2022—Present)
 - *Diagnostics* (2022—Present)
- Grant reviewer for:
 - Outstanding Research Award, Graduate and Professional Student Association, Arizona State University, Fall 2018—Spring 2022
 - *Teaching Excellence Award*, Graduate and Professional Student Association, Arizona State University, Fall 2018—Spring 2022
 - *Research Grants*, Graduate and Professional Student Association, Arizona State University, Fall 2018—Spring 2022
 - Travel Grants, Graduate and Professional Student Association, Arizona State University, Fall 2018—Spring 2022

PROFESSIONAL MEMBERSHIPS

American Society for Biochemistry and Molecular Biology (November 2019—*current*) American Society for Mass Spectrometry (January 2019—*current*)

SCHOLARSHIPS & AWARDS

2021	1 st Place Graduate Oral Presentation Award (\$100), Arizona Phys-
2021	Teaching Excellence Award (\$750), Graduate and Professional
2019	Student Association, Arizona State University Outstanding Research Award (\$500), Graduate and Professional Student Association, Arizona State University
2016—2018	Arizona Graduate Scholar Award (\$4000), Graduate College, Ari- zona State University
FUNDING	
2022	Publication Fee Grant (\$1200), Graduate Professional and Student Association, Arizona State University
2019—2020	Exercise and Nutritional Sciences Block Grant (\$5000), College of Health Solutions, Arizona State University
2019	Travel Support Grant (\$522), College of Health Solutions, Arizona
2019	Individual Travel Grant Award (\$888), Graduate Professional and Student Association, Arizona State University

2019 Travel Support Grant (\$367), College of Health Solutions, Arizona State University

PENDING/SUBMITTED GRANTS AND APPLICATIONS

2022 Presidential Postdoctoral Fellowship Program, School of Molecular Sciences, Arizona State University

PROFESSIONAL DEVELOPMENT IN TEACHING AND RESEARCH

- EXW 784: Teaching Practicum/Internship (90 hours)
 - Structured practical experience following a contract or plan, supervised by faculty and practitioners.
- NTR 791: PhD Professional Seminar (135 hours)
 - A small class emphasizing discussion, presentations by students, and written research papers.