

## CURRICULUM VITAE

### Promotion and Tenure Vita

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## A. EDUCATION AND EMPLOYMENT

### *Education*

- 2012 PhD, Nutritional Biology, Designated Emphasis in Biotechnology, Area of Specialization in Analytical Chemistry  
University of California, Davis  
Dissertation: “Digestomics of Human Milk: Towards Improved Feeding of Premature Infants”
- 2008 BA, Kinesiology: Health Sciences  
Rice University

### *Positions*

- 9/2022 – present Associate Professor of Nutrition, College of Health, Oregon State University, Corvallis, Oregon
- 9/2022 – present Biohealth Valley Fellow, Oregon State University, Corvallis, Oregon
- 9/2023 – present Nutrition Graduate Program Director, College of Health, Oregon State University, Corvallis, Oregon

### **-----post-tenure application-----**

- 1/2016 – 8/2022 Assistant Professor of Nutrition, College of Public Health and Human Sciences, Oregon State University, Corvallis, Oregon
- 1/2019 – present Adjunct Faculty Member, Department of Food Science and Technology, College of Agricultural Sciences, Oregon State University, Corvallis, Oregon
- 9/2019 – 9/2022 Nutrition Undergraduate Program Director, College of Public Health and Human Sciences, Oregon State University, Corvallis, Oregon
- 8/2012 – 12/2015 Post-doctoral Research Fellow, Department of Food Science and Technology, University of California, Davis, Davis, CA
- 9/2008 – 6/2012 Graduate Student Researcher, Department of Nutritional Biology, University of California, Davis, Davis, CA
- 6/2008 – 8/2008 Nutrition Policy Intern, Houston Department of Health and Human Services, Houston, TX
- 7/2007 – 8/2007 Intern, Rice Humanitarian Medical Outreach, Kpando, Ghana

5/2007 – 7/2007 Intern, Beyond Traditional Borders, Mbabane, Swaziland

9/2006 – 6/2007 Research Intern, USDA/ARS Children’s Nutritional Research Center, Baylor College of Medicine, Houston, TX

## B. TEACHING, ADVISING AND OTHER ASSIGNMENTS

### Instructional Summary

My teaching responsibilities have ranged from 3 to 10 credits per academic year (due to research buy-outs). Except for a slash course (NUTR 517) and a Nutrition Seminar course focused on writing projects that I created for graduate students (NUTR 605), all courses have been for undergraduates, due to the low demand for new graduate courses in Nutrition. In addition, I have given guest lectures in courses and offered research and thesis credits to undergraduates and graduate students focused on their areas of interest.

#### *B1.1 Credit Courses*

Term	Year	Course Number	Course Title	Credits	Enrollment
Fall	2023	NUTR 417/517	Human Nutrition Science	4	
Fall	2023	NUTR 240	Human Nutrition	3	
Winter	2022	NUTR 240	Human Nutrition	3	109
Fall	2021	NUTR 417/517	Human Nutrition Science	4	42
Winter	2021	NUTR 240	Human Nutrition	3	62
Fall	2020	NUTR 417/517	Human Nutrition Science	4	49
Fall	2020	NUTR 240	Human Nutrition	3	108
Winter	2020	NUTR 605	Readings and Conferences	1	7
Fall	2019	NUTR 417/517	Human Nutrition Science	4	43
Fall	2018	NUTR 417/517	Human Nutrition Science	4	42
Fall	2017	NUTR 417/517	Human Nutrition Science	4	61
Winter	2017	NUTR 225	General Human Nutrition	3	98
Fall	2016	NUTR 417/517	Human Nutrition Science	4	51

#### *Independent Credit Course*

Term	Year	Course Number	Course Title	Credits	Enrollment
Winter	2022	NUTR 401	Research	1	1
Winter	2022	FST 501	Research	8	1
Spring	2021	FST 501	Research	6	1
Spring	2021	FST 503	Thesis	22	2

Spring	2021	FST 601	Research	15	1
Spring	2021	NUTR 401	Research	2	1
Winter	2021	FST 503	Thesis	11	1
Winter	2021	FST 601	Research	13	1
Winter	2021	NUTR 401	Research	2	1
Winter	2021	NUTR 603	Thesis	9	1
Fall	2020	FST 503	Thesis	10	1
Fall	2020	FST 601	Research	12	1
Fall	2020	NUTR 603	Thesis	9	1
Summer	2020	FST 503	Thesis	17	2
Spring	2020	FST 503	Thesis	24	2
Spring	2020	NUTR 401	Research	4	2
Spring	2020	NUTR 603	Thesis	12	1
Winter	2020	FST 501	Research	14	2
Winter	2020	NUTR 603	Thesis	12	1
Fall	2019	FST 501	Research	17	3
Fall	2019	NUTR 603	Thesis	9	1
Summer	2019	FST 510	Internship	1	1
Spring	2019	FST 501	Research	8	1
Spring	2019	NUTR 603	Thesis	9	1
Winter	2019	FST 501	Research	4	1
Winter	2019	KIN 401	Research and Scholarship	3	1
Winter	2019	NUTR 603	Thesis	7	1
Fall	2018	FST 501	Research	8	1
Fall	2018	NUTR 603	Thesis	13	1
Spring	2018	NUTR 603	Thesis	5	1
Winter	2018	NUTR 603	Thesis	11	1
Fall	2017	NUTR 603	Thesis	24	2
Spring	2017	NUTR 406	Special Problems; Projects	12	1
Spring	2017	NUTR 603	Thesis	14	2
Winter	2017	NUTR 401	Research	8	1
Winter	2017	NUTR 603	Thesis	12	2
Fall	2016	NUTR 401	Research	9	2
Fall	2016	NUTR 603	Thesis	6	2
Spring	2016	KIN 401	Research and Scholarship	2	1

Spring	2016	NUTR 401	Research	3	2
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***B1.2 Invited Guest Lectures and Workshops***

3/31/2022 Chemistry Graduate Program Seminar. Guest lecture on “Digestive survival of human and bovine milk proteins and release of antimicrobial and immunomodulatory milk peptides.” Oregon State University 30 participants.

11/9/2021 NUTR 104, Orientation to the Nutrition Major. Guest lecture on the Nutrition Health Sciences major career options and my research area to encourage new students to participate in research projects. Oregon State University. 49 participants.

**-----post-tenure application-----**

11/13/2020 NUTR 307, Nutrition major seminar. Guest lecture on careers in nutrition research and current research projects. 25 participants.

11/9/2020 NUTR 104, Orientation to the Nutrition Major. Guest lecture on my research area to encourage new students to participate in research projects. Oregon State University. ~40 participants.

11/7/2019 NUTR 104, Orientation to the Nutrition Major. Guest lecture on my research area to encourage new students to participate in research projects. Oregon State University. ~40 participants.

11/5/2018 NUTR 514/FST 514, Health Benefits of Functional Foods, Nutraceuticals and Dietary Supplements. A 1-hour guest lecture on “Milk Bioactives and Peptides.” Oregon State University. 16 participants.

11/1/2018 NUTR 104, Orientation to the Nutrition Major. Guest lecture on my research area to encourage new students to participate in research projects. Oregon State University. ~40 participants.

2/5/2018 – 6/30/2018 CBEE 416, Engineering Design. Designed project for and assisted in mentoring of a 3-student chemical engineering team in collaboration with Dr. Adam Higgins. The project required creation of a continuous feedback system for using continuous glucose monitors to control glucose infusion rates to improve preterm infant glucose control and neurodevelopmental outcomes. Oregon State University.

10/24/2017 NUTR 225, General Human Nutrition. Guest Lecture on “Protein Nutrition.” Oregon State University, 150 participants.

5/22/2017 Certified Northwest in Portland. Guest Lecture on “Human Milk and Your Baby’s Health.” Oregon State University, 20 participants. Portland, OR.

- 4/26/2016 NUTR 225, General Human Nutrition. Guest Lecture on “Protein Nutrition.” Oregon State University, 126 participants.
- 4/21/2017 NUTR 240, Human Nutrition. Guest Lecture on “Protein Nutrition.” Oregon State University, 100 participants.
- 2/19/2016 NUTR 507/607, Nutrition Seminar. Guest Lecture on “Milk Protein Digestion: An Omics Perspective.” Oregon State University, 25 participants.
- 10/15/2016 FST 201A, Food Chemistry and Biotechnology. Guest lecture on “Peptidomics and Proteomics for Food Science.” UC Davis.
- 12/12/2014 NUT 250, Metabolic Homeostasis. Guest lecture on “Effect of Dietary Protein Type and Treatment on Gut Bacteria, Microbial Metabolites, Inflammation and Disease.” UC Davis.
- 11/6/2014 FST 201A, Food Chemistry and Biotechnology. Lab practical guest lecture on “Liquid chromatography and mass spectrometry.” A 1-hour, hands-on lecture introducing analytical instrumentation (liquid chromatography, electrospray mass spectrometry) and peptide extraction. UC Davis.
- 10/30/2014 FST 201A, Food Chemistry and Biotechnology. A 2-hour guest lecture on “Peptidomic Profiling in Food Science.” UC Davis.
- 12/7/2013 NUT 250, Metabolic Homeostasis. Guest lecture on “Milk Protein Digestomics.” UC Davis.
- 11/7/2013 FST 201A, Food Chemistry and Biotechnology. A 2-hour guest lecture on “Peptidomics and Proteomics in Food Science.” UC Davis.
- 1/23/2013 FST 290, Food Science Graduate Seminar. Guest lecture on “Digestomics: Unraveling the Complexity of Naturally Occurring Milk Peptides.” UC Davis.
- 12/3/2012 NUT 250, Metabolic Homeostasis. A 2-hour guest lecture on “Proteomics as a Tool for Understanding Metabolism.” UC Davis.
- 11/15/2012 FST 201A, Food Chemistry and Biotechnology. Lab practical guest lecture on “Analytical Chemistry, Liquid Chromatography and MALDI Mass Spectrometry.” A 1-hour, hands-on lecture introducing analytical instrumentation (liquid chromatography, electrospray mass spectrometry) and peptide extraction. UC Davis.
- 10/31/2012 NUT 298A, Nutrition Graduate Seminar. Guest lecture on “Peptidomics and Degradomics of Human Milk.” UC Davis.

- 10/26/2012 NUT 298A, Nutrition Graduate Seminar. Guest lecture on “Nutritional Proteomics.” UC Davis.
- 10/25/2012 FST 201A, Food Chemistry and Biotechnology. Guest lecture on “Proteomics for Food Science.” UC Davis.

### ***B1.3 Course and Curriculum Development***

- Winter 2021 Refined NUTR 240 for remote delivery. Added daily quizzes and worksheets for each class so that students have ample opportunity for growth and clear understanding of learning expectations.
- Fall 2020 Helped develop a proposal for an E-campus Nutrition degree option. Included identifying course plan and developing new courses. Developed NUTR417 and 240 for remote delivery.
- Winter 2020 Designed and taught NUTR 605 which focused on setting and achieving realistic writing goals and based on graduate students’ stated needs.
- Fall 2019 Redesigned NUTR417/517 as part of the New2OSU program to focus on critical thinking skills, teamwork, discussion, writing and presentations.
- Fall 2018 NUTR417/517, Human Nutrition Science. To enhance engagement and improve understanding of the material, developed daily in-class review questions that were answered in small groups and discussed as a whole class.
- Fall 2017 NUTR417/517, Human Nutrition Science. Introduced student team debates on controversial topics in macronutrient research.
- Winter 2017 NUTR225, General Human Nutrition. To enhance student engagement, added in-class small group assignments.
- 2016 – 2017 Served on a committee to develop and MPH Nutrition track, including development of the required and elective courses.
- Fall 2016 NUTR417/517, Human Nutrition Science. Began drawing and explaining all the metabolic pathways live for students, which enabled them to learn more effectively than from my Powerpoint slides. Required students to obtain editing help from the Writing Center for their essays. Also initiated peer reviews of writing, which resulted in improved writing. Overall, these changes resulted in much stronger writing.

### ***B1.4 Graduate Students, Postdoctoral Trainees and Undergraduate Students***

#### **Current**



### ***Current Research Staff***

1. Jennifer Branson, lab manager
2. Jillien Zukaitis, faculty research assistant. (May 1, 2023 – September 15, 2023).

### ***Current Research Associates***

1. Bum Jin Kim. Project: Identifying functional milk glycopeptides. (July 2018 – present).
2. Ningjian Liang. Project: Identifying functional milk peptides. (March 2019 – present).

### ***Current Postdoctoral Scholars***

1. Michael Pitino. Project: Effects of high pressure processing on milk proteins. (February 2023 – present).
2. Abdul Wazed. Project: Bioactive peptides. (February 2023 - present).

### ***Current Graduate Students***

1. Yunyao Qu, **PhD Advisor/Mentor**, Food Science and Technology Program. Project: Effect of daily consumption of glycomacropeptide on human gut health. Thesis in progress. (September 2020 – present). Expected to graduate June 2023.
2. Wyatt Olsen, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Immunomodulatory effect of bovine milk casein glycomacropeptide. Dissertation in progress. (July 2019 – present). Expected to graduate Fall 2023.
3. Samuel Adler, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Effects of in vivo digestion on the anti-inflammatory bioactivity of glycomacropeptide and whey protein isolate. Dissertation in progress. (August 2021 – present). Expected to graduate Spring 2023.
4. Joanna Haas. **MS Advisor/Mentor**, Food Science and Technology Program. Project: Effects of spray drying and freeze drying on the retention of bioactive proteins in whey. (September 2022 – present). Expected to graduate June 2024.
5. Marie Biondi. **MS Advisor/Mentor**, Food Science and Technology Program. Project: Survival of glycomacropeptide in human circulation. (September 2022 – present). Expected to graduate June 2024.
6. Paige Benson. **MS Advisor/Mentor**, Food Science and Technology Program. Project: Bitter peptides in model cheeses. (September 2022 – present). Expected to graduate June 2024.
7. Suwimon Sutantawong. **MS Advisor/Mentor**, Food Science and Technology Program. Project: Whey protein digestion proteomics in adults. (September 2022 – present). Expected to graduate June 2024.
8. Brianne Wai. **PhD Advisor/Mentor**, Nutrition Program. Project: Bioactive milk peptides and proteins. (September 2022 – present). Expected to graduate June 2026.
9. Haley Paxton. **MSN-PD Advisor/Mentor**, Nutrition Program. Project: TBD. (September 2022 – present). Expected to graduated June 2024.
10. Atik Rahman. **PhD Advisor/Mentor**, Nutrition Program. Project: Bioactive milk peptides and proteins. (September 2023 – present). Expected to graduate June 2027.
11. Caleb Mark. **PhD Advisor/Mentor**, Food Science and Technology Program. Project: Bioactive milk peptides and proteins. (September 2023 – present). Expected to graduate June 2027.

12. Jillien Zukaitis. **PhD Advisor/Mentor**, Nutrition Program. Project: Bioactive milk peptides and proteins. (September 2023 – present). Expected to graduate June 2027.
13. Molly Aloia. **PhD Advisor/Mentor**, Nutrition Program. Project: Bioactive milk peptides and proteins. (September 2023 – present). Expected to graduate June 2027.

#### ***Current Visiting Researchers***

1. Sudarshan Kumar, **Fulbright Visiting Scholar Award Mentor**, Project: Proteomics based approaches to decipher the antibacterial mechanisms of antimicrobial peptides (AMPs) against *Staphylococcus aureus*. (March 21, 2023 – December 30, 2023).

#### ***Current Graduate Student Committees***

1. Naomi de Hart, **PhD Committee Member**, Micah Drummond lab, University of Utah. Project: GMP and skeletal muscle. Dissertation in progress.
2. Hailey Zhou, **MS Committee Member**, Jung Kwon's lab, OSU. Project: In vivo feeding study with C57/BL6 mice, assessing metabolic markers and anti-obesity effects by supplementing two types of seaweeds (Dulse and Nori) on a Western diet. Thesis in progress.
3. WooJae Jung, **PhD Committee Member**, Jung Kwon's lab, OSU. Project: Marine-derived protein hydrolysate production and effect on muscle cells. Thesis in progress.
4. Hyunhee Hong, **PhD Committee Member**, Si Hong Park's lab, OSU. Project: Metabolomic and genomic characterization of *Listeria monocytogenes*. Thesis in progress.

#### ***Current Grad Council Representative***

1. Kelly Ramzy, Chemistry **PhD Grad Council Representative**. Project: Microfluidic devices for urine and white cell analysis for cancer diagnostics. Dissertation in progress. (April 1, 2016 – present).
2. Jiawei Liu, Chemistry **PhD Grad Council Representative**. Project: Using femtosecond transient absorption and femtosecond stimulated Raman spectroscopy to determine how the structural difference between coumarin 153 and coumarin 102 molecules affects quantum yield. Dissertation in progress. (September 2019 – present).
3. Philip Batterson, Kinesiology **PhD Grad Council Representative**. Project: mitochondrial protein turnover, metabolism and respiration changes after exercise. Dissertation in progress. (December 2020 – present).
4. Collin Peterson, Health Policy **PhD Grad Council Representative**. Project: Cost-effectiveness analysis of athletic training services. Dissertation in progress. (February 2022 – present).
5. Doctor Stephen, Chemistry **PhD Grad Council Representative**. Project: Separation of precious metals via crystallization and extraction. Dissertation in progress. (January 2023 – present).
6. Anh Tuan Nguyen, Chemistry **PhD Grad Council Representative**. Project: Electrochemical sensor development to investigate the chemical microenvironment in bacterial biofilms. (February 2023 – present).
7. Jackson Brim-Edwards, Kinesiology, **MS Grad Council Representative**. February, 2023 – present).

#### ***Current Undergraduate Student Researchers***

1. Kimberly Svoboda, **Undergraduate Research Advisor**—paid employee. Project: High pressure processing effects on milk proteins. (September 2022 – present).
2. Brenna Gannett, **Undergraduate Research Advisor—URSA Engage Program**. Project: High pressure processing effects on milk proteins. (January 2023 – present).
3. Ashley McKelvey, **Undergraduate Research Advisor—URSA Engage Program**. Project: High pressure processing effects on milk proteins. (January 2023 – present).
4. Rachel Spencer. **Undergraduate Honors Thesis Advisor**, paid employee. Nutrition major. Project: Immunomodulatory actions of glycomacropeptide from bovine milk. (February 2022 – present).
5. Rachel Pung. **Undergraduate Research Advisor, Summer Undergraduate Research Experience (SURE) Advisor**, paid employee. BioHealth Sciences major. Project: Assessing the effect of alternative human milk processing methods on survival or bioactive proteins in the infant gut. (June 2022 – present).
6. Ainsley Beck. **Undergraduate Research Advisor**. Survival of milk proteins across digestion in adults. (February 2023 – present).
7. Constanza Cordova. **Undergraduate Research Advisor**. Effect of freeze drying and spray drying on milk bioactive proteins. (March 2023 – present).
8. Tanner Mathews. **Undergraduate Research Advisor**. High pressure processing effects on milk proteins. (March 2023 – present).
9. Hailey Kelly. **Undergraduate Research Advisor**. Bioactive milk peptides. (June 2023 – present).

## **Completed**

### ***Completed Postdoctoral Scholars***

1. Jeewon Koh. Project: Examining digestion of glycomacropeptide from bovine milk whey protein in adults; effects of probiotic supplementation on protein digestion in infants. (September 2019 – August, 2021).
2. Jiraporn Lueangsakulthai, PhD. **Postdoctoral Advisor/Mentor**. Project: Analyzing the survival of antibodies in infant digestion; identifying functional milk peptides. (July 2018 – March 2021). Currently Scientist II at Orbit Discovery, a company that develops bioactive peptide therapeutics.
3. Baidya Nath P. Sah, PhD. **Postdoctoral Advisor/Mentor**. Project: Analyzing the survival of antibodies in infant digestion; identifying functional milk peptides. (March 2018 – December 2020). Currently Lead Food Scientist at Helaina Inc., a company that creates synthetic human milk.
4. Veronique Demers-Mathieu, PhD. **Postdoctoral Advisor/Mentor**. Project: Milk protein digestion and bioactive discovery. (January 2016 – December 2018). Currently Senior Research Scientist at Medolac Laboratories, a company that creates human donor milk products for preterm infants.
5. Soeren Drud Nielsen. PhD. **Postdoctoral Advisor/Mentor**. Project: Predicting functional peptides released in milk protein digestion. (February 2016 – February 2017). Currently Assistant Professor, Department of Food Science, Aarhus University, Denmark.

### ***Completed Visiting Researchers***

1. Alexandra Gogel. **Visiting PhD Student Advisor/Mentor**. Awarded the International Society for Research in Human Milk and Lactation's Trainee Expansion Program Trainee

Travel Fund Award. Visited lab from Mar 2022 – June 2022 for collaborative research on the human milk proteome. Currently PhD student at University of Idaho mentored by Shelley McGuire and Mark McGuire.

2. Yimin Chen, PhD. **Postdoctoral Advisor/Mentor**. Awarded the International Society for Research in Human Milk and Lactation's Trainee Expansion Program Trainee Travel Fund Award. Visited lab from January – March 2019 for collaborative research on bioactive peptides in human colostrum. Currently Assistant Professor at University of Idaho.

### ***Completed Graduate Students***

1. Russell Kuhfeld, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Predicting the evolution of cheese bitterness via peptidomics, protease-focused proteomics and microbial sequencing. Dissertation complete. (March 2021 – June 2023).
2. Bailey Ludwig, **MSN-PD Advisor/Mentor**, Nutrition Program. Project: Survival of human milk proteins after Holder pasteurization and high pressure processing treatment in milk and in the infant digestive system. Capstone complete. (September 2021 – June 2023).
3. Gloria Angima, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Colonic adaptation to lactose consumption in lactase non-persistent individuals: the role of the gut microbiome and microbial metabolome in graded, incremental exposure to lactose and prebiotics. Dissertation complete. (July 2020 – September 2022).
4. Bryna Rackerby, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Effect of bovine milk casein glycomacropeptide on the adult human microbiome and microbial metabolome ex vivo and in vivo. Dissertation complete. (July 2019 – June 2021).
5. Robert Beverly, **PhD Advisor/Mentor**, Nutrition Program. Dissertation: "Identifying Differences in the Release of Bioactive Milk Peptides Across the Intestinal Tracts Between Term and Preterm Infants." Dissertation complete. (July 2016 – February 2021). Currently a postdoctoral fellow at the Food and Drug Administration developing mass spectrometry-based proteomic methods for detection of food allergen proteins.
6. Yunyao Qu, **MS Advisor/Mentor**, Food Science and Technology Program. Project: Digestion and bioactivity of bovine casein glycomacropeptide in healthy adults. Thesis complete. (January 2018 – August 2020).

### ***Past Rotating Graduate Students***

1. Konstantinos Theodosiadis, **PhD Advisor/Mentor**, Food Science and Technology Program. Project: Effect of high pressure processing on milk fat absorption in preterm infants. Thesis in progress. (June 2022 – January 2023).
2. Lauren Chan, **PhD Rotation Mentor**, Nutrition Program. Project: Milk proteases. (Rotation: December 2018 – April 2019).
3. Melinda Spooner, **PhD Research Advisor**, Nutrition Program. Project: Milk protein digestion. (July 2016 – December 2017). Transferred to a different laboratory.

### ***Completed Faculty Research Assistants***

1. Yunyao Qu, Faculty Research Assistant, **Advisor/Mentor**, Project: Milk bioactive peptides. (June 1, 2016 – August 1, 2018).

### ***Completed Graduate Student Committees***

1. Fanyu Meng, **PhD Invited External Examiner**, Alan Kelly lab, University College Cork, Ireland. Thesis: “Biochemistry, Physicochemical Properties, and Processing of Human Milk and Comparison to Bovine Milk.” (Completed June, 2021).

#### ***Completed Graduate Council Representative Student Committees***

1. Brian Head, Molecular and Cell Biology PhD student. Project: Vitamin E deficiency in zebrafish embryogenesis disrupts critical developmental pathways and leads to epigenetic reprogramming associated with impaired neurodevelopment. (March 1, 2018 – March 2021).
2. Arpita Tiwari, Health Management & Policy PhD student. Project: The impact of dental-medical integration on diabetic outcomes. (May 1, 2016 – 2021).

#### ***Completed Undergraduate Research Interns***

1. Shravya Vellanki, **Undergraduate Research Advisor—STEM Leaders Program**. Project: High pressure processing effects on milk proteins. (January 2023 – June 2023).
2. Esha Ahmed, **Undergraduate Research Advisor—URSA Engage Program**. Project: High pressure processing effects on milk proteins. (January 2023 – June 2023).
3. Natalie Shaffer. **Undergraduate Research Advisor**, Food Science major. Project: isolation of bitter peptides from cheese. (March 2022 – March 2023).
4. Maggie Sheng, **Undergraduate Research Advisor—URSA Engage Program**. Project: Lab organization and start-up guide. (January 2022 – March 2023).
5. Salimah (Farah) Afifah, **Undergraduate Research Advisor—URSA Engage Program**. Lab organization and start-up guide. (January 2022 – March 2023).
6. Michelle Le. **Undergraduate Research Advisor**, BioHealth Sciences major. Project: Assessing the effect of alternative human milk processing methods on survival or bioactive proteins in the infant gut. (June 2022 – March 2023). **Summer Undergraduate Research Experience (SURE) Advisor**.
7. Jessica Yang, **Undergraduate Honors Thesis Advisor**, BioHealth Sciences major, Honors College. Project: Glycomacropptide extraction and analysis manuscript writing. (June 2020 – January 2023).
8. Anna Nielsen. **Undergraduate Research Advisor**, Nutrition major. Project: Lab organization and start-up guide. (December 2021 – January 2023).
9. Emily Robin McAllister, **Undergraduate Honors Thesis Advisor—URSA Engage Program**, BioHealth Sciences major, Honors College. Project: Immunomodulatory and antimicrobial milk peptides. (February 2020 – June 2022).
10. Hansani Kasthuriarachchi, **Undergraduate Honors Thesis Advisor**, BioHealth Sciences major, Honors College. Project: Glycomacropptide influence on the adult microbiome. (May 2021 – June 2022).
11. Samantha Harris. **Undergraduate Research Advisor**, Nutrition major. Project: Effect of lactose and galactooligosaccharide supplementation on the microbiome and metabolome of subjects with lactose intolerance. (September 2021 – May 2022).
12. Sean (Jagjit) Athwal. **Undergraduate Research Advisor**, BioHealth Sciences major. Project: Proteomics of milk proteins after differing milk processing techniques. (June 2021 – June 2022).
13. Lara Rivera. **Undergraduate Research Advisor**, Nutrition major. Project: Lab organization and start-up guide. (December 2021 – June 2022).

14. Emily Vertel, **Undergraduate Research Advisor**, Nutrition major. Project: Increasing protein bioavailability in microalgae. (September 2021 – March 2022).
15. Solomon Baez, **Undergraduate Research Advisor**, Bioengineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (January 2019 – March 2022).
16. Prajna Woonimani, **Undergraduate Research Advisor**—URSA Engage Program, Microbiology major. Project: Antimicrobial milk peptides. (February 2020 – June 2021).
17. Aneila Che Parra, **Summer Undergraduate Research Experience (SURE) Advisor**. Biology major. Project: Literature review of proteases and lipase differences between term and preterm infants and the effects of high pressure processing. (April 2020 – June 2021).
18. Amir (Abdulrahman) Abdullah. **Undergraduate Research Advisor**, Nutrition major. Project: Increasing protein bioavailability in microalgae. (September 2021 – March 2022).
19. Matthew Howell, **Undergraduate Research Advisor**, Biochemistry & Molecular Biology major. Project: Comparison of bacterial protein fermentation in infants with and without probiotics. (December 2018 – January 2022).
20. Caleb Mark, **Undergraduate Research Advisor**, Nutrition Health Sciences major, Bioactive milk peptides and proteins. (January 2021 – January 2022).
21. Madison Cowles, **Undergraduate Research Advisor**, Nutrition Health Sciences major. Project: Antimicrobial milk peptides. (January 2020 – June 2021).
22. Grace Yeo, **Undergraduate Research Advisor**—URSA Engage Program, Biochemistry & Molecular Biology major. Project: Alternative processing methods for donor milk and effects on milk lipase activity. (December 2018 – June 2021).
23. Shahad Almahdi, **Undergraduate Research Advisor**, BioHealth Sciences major. Project: Microbiome-modulation of glycomacropeptide. (November 2020 – June 2021).
24. Anne Chaneeda Chhing, **Undergraduate Research Advisor**, Biomedical Engineering major. Project: Transport of milk peptides across Caco-2 cell monolayers. (June 2019 – December 2020).
25. Madison Gorton, **Undergraduate Research Advisor**, Biology and Nutrition major, Chemistry minor. Project: Effects of milk peptides on gastrointestinal epithelial cells. (June 2019 – December 2020).
26. Mikayla Chen, **Undergraduate Research Advisor**, Biochemistry and Molecular Biology major. Project: Immunomodulatory functions of milk peptides. (June 2019 – December 2020).
27. Anna Marin Kennedy, **Undergraduate Research Advisor**, Healthcare Management and Policy major, Chemistry minor. Project: Effects of milk peptides on gastrointestinal epithelial cells. (June 2019 – December 2020).
28. Benjamin Hauser, **Undergraduate Research Advisor**—URSA Engage Program, Biochemistry and Molecular Biology with Pre-Medical Option, Chemistry minor. Project: Analysis of milk antibody digestion. (December 2018 – December 2020).
29. Nur Ain Mansor, **Undergraduate Research Advisor**, Nutrition Health Sciences major. Project: Literature review for glycomacropeptide digestion and extraction. (March 2020 – July 2020).
30. Nur Aishah Sofia Mohamad Yanin, **Undergraduate Research Advisor**, Nutrition Health Sciences major. Project: Literature review for differences in term and preterm infant enzyme activity across digestion. (March 2020 – July 2020).

31. Yong How Tan, **Undergraduate Research Advisor**, Bioengineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (January 2019 – September 2019).
32. Abhijith Balijepalli, **Undergraduate Research Advisor**, Computer Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (April 2019 – September 2019).
33. Michael Guske, **Undergraduate Research Advisor**, Computer Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (April 2019 – September 2019).
34. Kimberly Lane, **Undergraduate Research Advisor**—URSA Engage Program, Nutrition major. Project: Analysis of milk antibody digestion. (December 2018 – July 2019).
35. Ulises Solis, **Undergraduate Research Advisor**, BioHealth Sciences major. Project: Analysis of milk antibody digestion. Awarded Summer Undergraduate Research Experience (SURE) grant by the College of Science to pay for 11 weeks of work in Summer 2019. (December 2018 – September 2019).
36. Siana Liti, **Undergraduate Research Advisor**, BioHealth Sciences/Pre-Dentistry major. Project: Analysis of milk antibody digestion. (December 2018 – July 2019).
37. Matthew Paluska, **Undergraduate Research Advisor**, Kinesiology major, Chemistry minor. Project: Analysis of milk antibody digestion. (September 2018 – July 2019).
38. Ashley Victor, **Undergraduate Honors Thesis Advisor**, Biology major. Project: Effect of breast milk treatment and storage on protein function, particularly lipase. Honors College. Thesis Complete. (March 1, 2016 – August 2019).
39. Anahi Torres-Pimentel, **Undergraduate Research Advisor**—STEM Leaders Program, Biochemistry major. Project: Protein digestion in infants. (October 24, 2017 – August 2019).
40. Quinn Handley, **Undergraduate Research Advisor**, Computer and Electrical Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (June 2018 – March 2019).
41. Anna-Liisa Sepp, **Undergraduate Research Advisor**, Bioengineering major. Project: Optimizing premature infant glucose balance via continuous glucose monitoring and data-controlled glucose infusion. (October 29, 2017 – March 2019).
42. Gabriel Johnson, **Undergraduate Research Co-Advisor** with Adam Higgins, Chemical Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (February 1, 2018 – March 2019).
43. Amanda Duong, **Undergraduate Research Co-Advisor** with Adam Higgins, Chemical Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (February 2018 – June 2018).
44. Seongcheol Kim, **Undergraduate Research Co-Advisor** with Adam Higgins, Chemical Engineering major. Project: Design of automated feedback loop for using continuous glucose monitoring to control glucose infusion rate for preterm infant glucose control. (February 2018 – June 2018).

45. Kimber Kirschner, **Undergraduate Research Mentor**, Nutrition Program major. Project: Effect of milk heat treatment of proteases. (October 2016 – May 2017).
46. Kelly Hollenbeck, **Undergraduate Research Mentor**—URSA Engage Program, Bioengineering major. Project: Differences in macronutrient composition between amniotic fluid and human milk. (January 2017 – October 2017).
47. Zoha Ahmad, **Undergraduate Research Mentor**—URAP Program, Nutrition major. Project: Effect of heat treatment on milk proteases. (January 2016 – September 2017).
48. Honglip Park, **Undergraduate Research Mentor**, Honors College, Biology major. Project: Effect of heat treatment on human milk proteases. (October 2016 – September 2017).
49. Jason Foss, **Undergraduate Research Advisor**, Microbiology major. Project: Effect of donor milk bank treatments on milk proteases. (August 2016 – July 2017).
50. Casey Collins, **Undergraduate Research Mentor**, Nutrition major. Project: Effect of common handling practices on human milk quality. (February 2016 – July 2017).
51. Carly Robertson, **Undergraduate Research Advisor**—URAP Program, Nutrition major. Project: Proteases in human milk with different heat treatments. (January 2016 – June 2017).
52. Nicole McGuire, **Undergraduate Research Advisor**, Nutrition major. Project: Effect of heat treatment on milk proteases. (September 2016 – May 2017).
53. Lyndi-Rae Petty, **Undergraduate Research Mentor**, Biology major. Project: Effect of maternal breast milk handling on milk protease and lipase activity. (February 2016 – January 2017).
54. Hannah Jantzi, **Undergraduate Research Advisor**, Kinesiology. Project: Peptide bioactivity database construction. (January 2016 – August 2016).

*As a post-doctoral fellow and PhD researcher at UC Davis, I mentored numerous students and researchers, including:*

*Graduate students:*

1. Randall Robinson, PhD student, Food Science
2. Junai Gan, PhD student, Food Science
3. Megan Sanctuary, PhD student, Nutritional Biology

*International scholars:*

4. Coline Martin, MS student, Food Science from Montpellier SupAgro agronomy school in Montpellier, France
5. Niamh Murray, PhD student, visiting for Fulbright Fellowship, University College Dublin, Foods for Health Ireland
6. Raissa Caminha Rodrigues, MS student in Food Science and Technology, visiting from Universidade Federal do Ceara, Brazil
7. Florine Citerne, MS student in Food Science, visiting from Agrocampus Ouest University, France
8. Christa Smink, MS student in Food Science, visiting from Wageningen University, the Netherlands
9. Meng Wang, MS student in Food Science, visiting from Wageningen University, the Netherlands
10. Shabnam Haghighat Khajavi, visiting Professor of Food Science from Islamic Azad University, Iran



11. Xiaoqun (Sherry) Zeng, visiting Professor of Food Science and Engineering from Ningbo University, China
12. Yuxing (Nancy) Guo, visiting Professor of Food Science and Technology from Nanjing Normal University, China

*Undergraduates:* Over 25 undergraduate research interns.

*High school student:* Mentored a high school student for 6 weeks in research for Young Scholars Program.

*Activities included supervising research, writing proposals, writing recommendation letters, revising scholarship applications, etc.*

## **B2. Student Evaluation Summary**

*Oregon State University has a standard questionnaire to evaluate the instructor. On the “Student’s Evaluation of Teaching form”, the ratings are “very poor=1, poor=2, fair=3, good=4, very good=5 and*

*excellent=6. These forms are completed anonymously online by the students. Reported below are the student answers to question 1 “the course as a whole was...”, and question 2 “the instructor’s contribution to the course was...”.*

Course and Section Number	Term	Year	Number of Evaluations/ Enrollment	Q1 Median	Q2 Median
NUTR 240	OSU Winter	2022	87/105	4.7	4.9
NUTR 417/517	OSU Fall	2021	29/41	4.8	5.0
NUTR 240	OSU Winter	2021	17/66	5.6	5.6
NUTR 240	OSU Fall	2020	31/104	4.9	5.1
NUTR 417/517 (solo-taught)	OSU Fall	2020	17/49	4.8	5.3
NUTR 417/517 (solo-taught)	OSU Fall	2019	22/43	4.8	5.1
NUTR 417/517 (co-taught)	OSU Fall	2018	22/41	3.8	4.4
NUTR 417/517 (co-taught)	OSU Fall	2017	24/41	4.4	4.9
NUTR 225	OSU Winter	2017	60/98	4.2	4.4
NUTR 417/517 (co-taught)	OSU Fall	2016	28/46	4.9	4.9

### ***B3. Peer Teaching Evaluations***

## Other Assignment: Leadership

9/2019 – 6/2022 **Nutrition Undergraduate Program Director.** I led and organized Nutrition Faculty meetings, help determine teaching schedules for each quarter, recruit new Nutrition students, respond to Nutrition student queries and more. I helped spearhead development of a new E-campus-only Nutrition Communication Options in partnership with Ingrid Skoog.

### *Activities as Nutrition Undergraduate Program Director*

10/11/2021-6/2022 Served on Master of Science Nutrition-Professional Degree Committee  
10/5/2021 National Transfer Student Week Panel. Recruitment event for transfer students to the Nutrition Program  
9/21/2021 Transfer Summit. Spoke at event to help community college staff know why students might want to join the Nutrition Program.  
4/10/2021 Orange and Black Day. Helped recruit students to the Nutrition Program.

## C. RESEARCH, SCHOLARSHIP AND CREATIVE ACTIVITY

To indicate the outcomes of my mentoring, I have annotated each publication as follows:

- <sup>a</sup> Denotes my current or former graduate student
- <sup>b</sup> Denotes my current or former postdoctoral student
- <sup>c</sup> Denotes my current or former undergraduate student
- <sup>d</sup> Denotes graduate student I helped mentor at another institution

Note: Each contribution indicates my specific role within the research, scholarship &/or creative activity. The following descriptions accompany the role indicated in the contribution:

Lead author: Wrote majority of paper, conceptualized idea, designed study, interpreted results.

Major contributor: Wrote significant portion of paper, assisted significantly in idea conceptualization, assisted significantly in interpreting results.

Contributing author: This role varies by specific contribution and could include, writing part(s) of the paper, participation in idea conceptualization, participation in interpreting results.

Senior author: This role typically consists of mentoring graduate and/ or undergraduate students through all aspects of the contribution.

### *C1.1 Refereed Journal Publications*

1. Liang, N.<sup>b</sup>, Mohammed, H., Kim, B. J.<sup>b</sup>, Waite-Cusic, J., **Dallas, D. C.** (Accepted July 5, 2023). High pressure processing of human milk: A balance between microbial inactivation and bioactive protein preservation. *Journal of Nutrition*. **Senior author**
2. Kuhfeld, R.<sup>a</sup>, Atamer, Z., **Dallas, D. C.** (Accepted June 1, 2023). A comprehensive database of cheese-derived bitter peptides and correlation to their physical properties.

Critical Reviews in Nutrition. <https://doi.org/10.1080/10408398.2023.2220792>. **Senior author**

3. Kim, B. J.<sup>b</sup>, Koh, J.<sup>b</sup>, Liang, N.<sup>b</sup>, Yang, J.<sup>c</sup>, Ozturk, G., Barile, D., **Dallas, D. C.** (Accepted May 6, 2023). Effect of vat pasteurization, ultra-high temperature sterilization, retort sterilization and homogenization on soluble proteins in donor human milk detected via proteomics. *LWT: Food Science & Technology*. <https://doi.org/10.1016/j.lwt.2023.114842>  
**Senior author**
4. Donovan, S. M., Abrams, S. A., Azad, M. B., Belfort, M. B., Bode, L., Carlson, S. E., Dallas, D. C., Hettinga, K., Jarvinen-Seppo, K., Kim, J., Lebrilla, C. B., McGuire, M. K., Sela, D. A., Neu, J. (Accepted January 9, 2023). Summary of the joint National Institutes of Health and the Food and Drug Administration workshop titled “Exploring the Science Surrounding the Safe Use of Bioactive Ingredients in Infant Formula: Considerations for an Assessment Framework”. *The Journal of Pediatrics*. <https://doi.org/10.1016/j.jpeds.2022.11.027>.  
**Major contributor**
5. Qu, Y.<sup>a</sup>, Kim, B. J.<sup>b</sup>, Koh, J.<sup>b</sup>, **Dallas, D. C.** (Accepted January 5, 2023). Comparison of solid-phase extraction sorbents for monitoring the in vivo intestinal survival and digestion of kappa-casein-derived caseinomacropeptide. *Foods*. *12*(2) 299. <https://doi.org/10.3390/foods12020299>  
**Senior author**
6. McGuire, M. K., Allen, L., **Dallas, D. C.**, McManaman, J., Sela, D., Seppo, A., Smilowitz, J. T., Raiten, D., Williams, J., Young, B.. (Accepted November 15, 2022). Ecologies, synergies, and biological systems shaping human milk composition—a report from Breastmilk Ecology and the Genesis of Infant Nutrition (BEGIN) Working Group 2. *American Journal of Clinical Nutrition*.  
**Major contributor**
7. Liang, N.<sup>b</sup>, Koh, J.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Ozturk, G., Barile, D., **Dallas, D. C.** (Accepted August 22, 2022). Structural and functional changes of bioactive proteins in human milk treated by vat-pasteurization, retort sterilization, ultra-high temperature pasteurization, freeze-thawing and homogenization. *Frontiers in Nutrition*. <https://doi.org/10.3389/fnut.2022.926814>  
**Senior author**
8. Koh, J.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Qu, Y.<sup>a</sup>, **Dallas, D. C.** (2022) Mass spectral profiling of caseinomacropeptide extracted from feeding material and jejunal fluid using three methods—ethanol precipitation, perchloric acid precipitation, and ultrafiltration. *Food Chemistry*. <https://doi.org/10.1016/j.foodchem.2022.133864>  
**Senior author**
9. Demers-Mathieu, V.<sup>b</sup>, Underwood, M. A., **Dallas, D. C.** (Accepted July 20, 2022). Premature delivery impacts the concentration of plasminogen activators and a plasminogen activator inhibitor in human milk. *Frontiers in Pediatrics. Neonatology*. DOI: 10.3389/fped.2022.917179

### Senior author

10. Liang, N.<sup>b</sup>, Kim, B. J.<sup>b</sup>, **Dallas, D. C.** (Accepted May, 2022). Bioavailability of peptides derived from the in vitro digestion of human milk assessed by Caco-2 cell monolayers. *Journal of Agricultural and Food Chemistry*. <https://doi.org/10.1021/acs.jafc.2c01246>  
**Senior author**
11. Koh, J.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Qu, Y.<sup>a</sup>, **Dallas, D. C.** (Nov 2021). Top-down glycopeptidomics reveal intact glycomacropeptide is digested to a wide array of peptides in the human jejunum. *Journal of Nutrition*. DOI: 10.1093/jn/nxab400  
**Senior author**
12. Liang, N.<sup>b</sup>, Beverly, R.<sup>a</sup>, Gorton, M.<sup>c</sup>, Scottoline, B. P., **Dallas, D. C.** (Nov 2021). Peptides derived from in vitro and in vivo digestion of human milk are immunomodulatory in THP-1 human macrophages. *Journal of Nutrition*. DOI: 10.1093/jn/nxab350  
**Senior author**
13. Chen, Y.<sup>b</sup>, Kim, B. J.<sup>b</sup>, **Dallas, D. C.** (Oct 2021). Proteomics analysis reveals digestion-resistant proteins from colostrum are associated with inflammatory and cytotoxic responses in intestinal epithelial cells. *Journal of Parenteral and Enteral Nutrition*. <https://doi.org/10.1002/jpen.2285>  
**Senior author**

### -----post-tenure application-----

14. Qu, Y.<sup>a</sup>, Kim, B. J.<sup>b</sup>, Koh, J.<sup>b</sup>, **Dallas, D. C.** (Aug 2021). Analysis of bovine kappa-casein glycomacropeptide by liquid chromatography-tandem mass spectrometry. *Foods* 10(9), 2028. <https://doi.org/10.3390/foods10092028>  
**Senior author**
15. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** (Mar 2021). Systematic examination of protein extraction, proteolytic glycopeptide enrichment and MS/MS fragmentation techniques for site-specific profiling of human milk N-glycoproteins. *Talanta* 224, 121811. <https://doi.org/10.1016/j.talanta.2020.121811>  
**Senior author**
16. Beverly, R. L.<sup>a</sup>, Huston, R. K., Markell, A. M., McCulley, E. A., Martin, R. L., **Dallas, D. C.** (Mar 2021). Differences in human milk peptide release along the gastrointestinal tract between preterm and term infants. *Clinical Nutrition* 40(3), 1214 – 1223. <https://doi.org/10.1016/j.clnu.2020.07.035>  
**Senior author**
17. Beverly, R.<sup>a</sup>, Woonnimani, P.<sup>c</sup>, Scottoline, B. P., Lueangsakulthai, J.<sup>b</sup>, **Dallas, D. C.** (Feb 2021). Milk peptides in the intestinal tract of breast milk-fed infants have antimicrobial and bifidogenic activity. *International Journal of Molecular Sciences* (Section: Bioactives and Nutraceuticals). Special Issue: Novel Findings and Insights into Dietary

Proteins and Bioactive Peptides in Gastrointestinal Diseases. 22(5), 2377. doi: 10.3390/ijms22052377

**Senior author**

18. Robinson, R. C.<sup>d</sup>, Nielsen, S. D.<sup>b</sup>, **Dallas, D. C.**, Barile, D. B. (Jan 2021). Can cheese mites, maggots and molds enhance bioactivity? Peptidomic investigation of functional peptides in four traditional cheeses. *Food & Function* 12(2), 633 – 645. <https://doi.org/10.1039/D0FO02439B>  
**Contributing author**
19. Lueangsakulthai, J.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Demers-Mathieu, V.<sup>b</sup>, Sah, B. N. P.<sup>b</sup>, Woo, Y., Olyaei, A., O'Connor, A. Scottoline, B. P., **Dallas, D. C.** (Nov 2020). Effect of digestion on stability of palivizumab IgG1 in the infant gastrointestinal tract. *Pediatric Research*. <https://doi.org/10.1038/s41390-020-01271-y>  
**Senior author**
20. Koh, J.<sup>b</sup>, Victor, A.<sup>c</sup>, Yeo, G.<sup>c</sup>, Qu, Y.<sup>a</sup>, **Dallas, D. C.** (Nov 2020). Effect of alternative processing techniques for donor breast milk on bile salt-stimulated lipase. *Frontiers in Nutrition* 7, 552362. <https://doi.org/10.3389/fnut.2020.552362>  
**Senior author**
21. Lueangsakulthai, J.<sup>b</sup>, Sah, B. N. P.<sup>b</sup>, Scottoline, B. P., **Dallas, D. C.** (Oct 2020). Survival of recombinant monoclonal and naturally-occurring human milk immunoglobulins A and G specific to respiratory syncytial virus F protein across simulated human infant gastrointestinal digestion. *Journal of Functional Foods* 73, 104 – 115. **Error! Hyperlink reference not valid.** <https://doi.org/10.1016/j.jff.2020.104115>  
**Senior author**
22. Nielsen, S. D.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, Underwood, M. A., **Dallas, D. C.** (Sept 2020). Differences and similarities in the peptide profile of preterm and term mother's milk and preterm and term infant gastric samples. *Nutrients* 12(9), 2825. <https://doi.org/10.3390/nu12092825>  
**Senior author**
23. Rackerby, B.<sup>a</sup>, Kim, H. J., **Dallas, D. C.**, Park, S. H. (Aug 2020). Understanding the Effects of Dietary Components on the Gut Microbiome and Human Health. *Food Science and Biotechnology*. *Food Science and Biotechnology* 29(11), 1463 – 1474. doi:10.1007/s10068-020-00811-w  
**Contributing author**
24. Sah, B. N. P.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Hauser, B. R.<sup>c</sup>, Demers-Mathieu, V.<sup>b</sup>, Scottoline, B. P., Pastey, M. K., **Dallas, D. C.** (Aug 2020). Purification of antibodies from human milk and infant digestates for viral inhibition assays. *Frontiers in Nutrition* (Section: Nutritional Immunology) 7, 136. <https://doi.org/10.3389/fnut.2020.00136>  
**Senior author**

25. Sah, B. N. P.<sup>b</sup>, Hauser, B. R.<sup>c</sup>, Lueangsakulthai, J.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Scottoline, B. P., Pastey, M. K., **Dallas, D. C.** (Aug 2020). Partial degradation of recombinant antibody functional activity during infant gastrointestinal digestion: Implications for oral antibody supplementation. *Frontiers in Nutrition* (Section: Nutritional Immunology) 7(130). 10.3389/fnut.2020.00130  
**Senior author**
26. Demers-Mathieu, V.<sup>b</sup>, Qu, Y.<sup>a</sup>, Sah, B. N. P.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Underwood, M. A., Scottoline, B., **Dallas, D. C.** (June 2020). Binding and neutralizing capacity of respiratory syncytial virus (RSV)-specific recombinant IgG against RSV in human milk, gastric and intestinal fluids from infants. *Nutrients* (Section: Nutritional Immunology) 12(7), 1904. <https://doi.org/10.3390/nu12071904>  
**Senior author**
27. Demers-Mathieu, V.<sup>b</sup>, Huston, R. K., Markell, A. M., McCulley, E. A., Martin, R. L., **Dallas, D. C.** (June 2020). Impact of pertussis-specific IgA, IgM, and IgG antibodies in mother's own breast milk and donor breast milk during preterm infant digestion. *Pediatric Research* 89(5), 1136 – 1143. <https://doi.org/10.1038/s41390-020-1031-2>  
**Senior author**
28. Kim, B. J.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Sah, B. N. P.<sup>b</sup>, Scottoline, B., P., **Dallas D. C.** (June 2020). Quantitative analysis of antibody digestion across the infant digestive tract using mass spectrometry with parallel reaction monitoring. *Foods* 9(6), 759. <https://doi.org/10.3390/foods9060759>  
**Senior author**
29. Demers-Mathieu, V. Huston, R. K., **Dallas, D. C.** (2020). Cytokine expression by human macrophage-like cells derived from the monocytic cell line THP-1 differs between treatment with milk from preterm- and term-delivering mothers and pasteurized donor milk. *Molecules* 25(10), 2376.  
**Senior author**
30. Lueangsakulthai, J.<sup>b</sup>, Sah, B. N. P.<sup>b</sup>, Scottoline, B. P., **Dallas, D. C.** (2020). Survival of respiratory syncytial virus F protein-specific recombinant monoclonal antibodies (IgG, IgA and sIgA) and naturally-occurring antibodies (IgG and sIgA/IgA) in an ex vivo infant digestion model. *Nutrients* (Section: Nutritional Immunology) 12(3), 621. <https://doi.org/10.3390/nu12030621>  
**Senior author**
31. Weinborn, V.<sup>d</sup>, Li, Y., Shah, I. M., Yu, H., **Dallas, D. C.**, German, J. B., Mills, D. A., Chen, X., Barile, D. (2020). Production of functional mimics of human milk oligosaccharides by enzymatic glycosylation of bovine milk oligosaccharides. *International Dairy Journal* 102. doi:10.1016/j.idairyj.2019.104583.  
**Contributing author**

32. Beverly, R. L.<sup>a</sup>, Huston, R. K., Markell, A. M., McCulley, E. A., Martin, R. L., **Dallas, D. C.** (2019). Milk peptides survive in vivo gastrointestinal digestion and are excreted in the stool of infants. *Journal of Nutrition* 150(4), 712 – 721. doi:10.1093/jn/nxz326  
**Senior author**
33. Demers-Mathieu, V.<sup>b</sup>, Huston, R. K., Markell, A. M., McCulley, E. A., Martin, R., **Dallas, D. C.** (2019). Antenatal influenza A-specific IgA, IgM and IgG antibodies in mother's own breast milk and donor breast milk, gastric contents and stools from preterm infants. *Nutrients* 11(7), 1585. <https://doi.org/10.3390/nu11071585>  
**Senior author**
34. Casavale, K.O., Ahuja, J., Wu, X., Li, Y., Quam, J., Olson, R., Pehrsson, P., Allen, L., Balentine, D., Hanspal, M., Hayward, D., Hines, E. P., McClung, J. P., Perrine, C. G., Belfort, M. B., **Dallas, D. C.**, German, J. B., Kim J., McGuire, M., McGuire, M., Morrow, A. L., Neville, M. Nommsen-Rivers, L., Rasmussen, K. M., Zemplini, J., Lynch, C. (2019). NIH workshop on human milk composition: summary and visions for a research program. *American Journal of Clinical Nutrition* 110(3), 769 – 779. <https://doi.org/10.1093/ajcn/nqz123>  
**Major contributor**
35. Demers-Mathieu, V.<sup>b</sup>, Huston, R. K., Markell, A. M., McCulley, E. A., Martin, R. L., Spooner, M.<sup>a</sup>, **Dallas, D. C.** (2019). Differences in maternal immunoglobulins within mother's own breast milk and donor breast milk and across digestion in preterm infants. *Nutrients* 11(4), 920. doi:10.3390/nu11040920  
**Senior author**
36. Beverly, R. L.<sup>a</sup>, Underwood, M. A., **Dallas, D. C.** (2019). Peptidomics analysis of milk protein-derived peptides released over time in the preterm infant stomach. *Journal of Proteome Research* 18(3), 912 – 922. doi:10.1021/acs.jproteome.8b00604  
**Senior author**
37. Nielsen, S. D.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, Underwood, M. A., **Dallas, D. C.** (2018). Release of functional peptides from mother's milk and fortifier proteins in the premature infant stomach. *PLOS One* 13(11), e0208204. doi.org/10.1371/journal.pone.0208204  
**Senior author**
38. Demers-Mathieu, V.<sup>b</sup>, Underwood, M. A., Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** (2018). Survival of immunoglobulins from human milk to preterm infant gastric samples at 1, 2, and 3 hours postprandial. *Neonatology* 114, 242 – 250.  
**Senior author**
39. Demers-Mathieu, V.<sup>b</sup>, Underwood, M. A., Beverly, R. L.<sup>a</sup>, Drud Nielsen, S.<sup>b</sup>, **Dallas, D. C.** (2018). Comparison of human milk immunoglobulin survival during gastric digestion between preterm and term infants. *Nutrients* (Special Issue on Breastfeeding and Human Lactation) 10(5), 631.  
**Senior author**



40. Nielsen, S. D.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** (2018) Milk proteins are predigested within the mammary gland. *Journal of Mammary Gland Biology and Neoplasia* 22(4), 251 – 261.  
**Senior author**
41. Murray, N. M.<sup>d</sup>, O’Riordan, D., Jacquier, J.-C., O’Sullivan, M., Holton, T. A., Wynne, K., Robinson, R. C.<sup>d</sup>, Barile, D., Nielsen, S. D.<sup>b</sup>, **Dallas, D. C.** (2018). Peptidomic screening of bitter and non-bitter sodium caseinate hydrolysate fractions for bioactive peptides. *Journal of Dairy Science* 101(4), 2826 – 2837.  
**Senior author**
42. Demers-Mathieu, V.<sup>b</sup>, Qu, Y.<sup>a</sup>, Underwood, M. A., **Dallas, D. C.** (2018). The preterm infant stomach actively degrades milk proteins with increasing breakdown across digestion time. *Acta Paediatrica* 107(6), 967 – 974.  
**Senior author**
43. **Dallas, D. C.**, Traber, M. (2018). How does breast milk enhance lutein absorption? *Journal of Nutrition* 148(1), 1 – 2.  
**Lead author**
44. Demers-Mathieu, V.<sup>b</sup>, Qu, Y.<sup>a</sup>, Underwood, M. A., Borghese, R., **Dallas, D. C.** (2018). Premature infants have lower gastric digestion capacity for human milk proteins than term infants. *Journal of Pediatric Gastroenterology & Nutrition* 66(5), 816 – 821.  
**Senior author**
45. Nielsen, S. D.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** (2017). Peptides released from foremilk and hindmilk proteins by breast milk proteases are highly similar. *Frontiers in Nutrition* (Section: Nutrition Methodology) 4(54).  
**Senior author**
46. Demers-Mathieu, V.<sup>b</sup>, Nielsen, S. D.<sup>b</sup>, Underwood, M. A., Borghese, R., **Dallas, D. C.** (2017). Changes in proteases, antiproteases and bioactive proteins from mother's breast milk to the premature infant stomach. *Journal of Pediatric Gastroenterology and Nutrition* 66(2), 318 – 324.  
**Senior author**
47. Murray, N. M.<sup>d</sup>, O’Riordan, D., Jacquier, J.-C., O’Sullivan, M., Cohen, J., Heymann, H., Barile, D., **Dallas, D. C.** (2017). Validation of a paper-disk approach to facilitate the sensory evaluation of bitterness in dairy protein hydrolysates from a newly developed food-grade fractionation system. *Journal of Sensory Studies* 32(3), e12266.  
**Senior author**
48. Demers-Mathieu, V.<sup>b</sup>, Nielsen, S. D.<sup>b</sup>, Underwood, M. A., Borghese, R., **Dallas, D. C.** (2017). Analysis of milk from mothers who delivered prematurely revealed few changes

in proteases and protease inhibitors across gestational age at birth and infant postnatal age. *Journal of Nutrition* 147(6), 1152 – 1159.

**Senior author**

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**Senior author**

50. Picariello, G., Addeo, F., Ferranti, P., Nocerino, R., Paparo, L., Passariello, A., Robinson, R. C.<sup>d</sup>, Barile, D., **Dallas, D. C.**, Berni Canani, R. (2016). Antibody-independent identification of bovine milk-derived peptides in breast-milk. *Food & Function* 7(8), 3402 – 3409.

**Major contributor**

51. **Dallas, D. C.**, Sanctuary, M.<sup>d</sup>, Qu Y.<sup>a</sup>, Khajavi, S. H.<sup>c</sup>, Van Zandt, A.<sup>c</sup>, Dyandra, M.<sup>c</sup>, Frese, S. A., Barile, D., German, J. B. (2015). Personalizing protein nourishment. *Critical Reviews in Food Science and Nutrition* 57(15), 3313 – 3331.

**Lead author**

52. **Dallas, D. C.**, Citerne, F.<sup>d</sup>, Tian, T., Silva, V. L. M., Kalanetra, K. M., Frese, S. A., Robinson, R. C.<sup>d</sup>, Mills, D. A., Barile, D. (2015). Peptidomic analysis reveals proteolytic activity of kefir microorganisms on bovine milk proteins. *Food Chemistry* 15(197), 273 – 84.

**Lead author**

53. **Dallas, D. C.**, Murray, N. M.<sup>d</sup>, Gan, J.<sup>d</sup> (2015). Proteolytic systems in milk: perspectives on the evolutionary function within the mammary gland and the infant. *Journal of Mammary Gland Biology and Neoplasia* 20(3-4), 133 – 47.

**Lead author**

54. Guerrero, A., **Dallas, D. C.**, Contreras, S., Bhandari, A.<sup>c</sup>, Cánovas, A., Islas-Trejo, A., Medrano, J. F., Parker, E. A., Wang, M.<sup>d</sup>, Hettinga, K., Chee, S., German, J. B., Barile, D., Lebrilla, C. B. (2015). Peptidomic analysis of healthy and subclinically mastitic bovine milk. *International Dairy Journal* 46, 46 – 52.

**Co-lead author**

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**Lead author**

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**Lead author**

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**Major contributor**

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**Co-lead author**

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**Lead author**

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**Major contributor**

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**Lead author**

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**Major contributor**

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**Lead author**

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**Lead author**

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**Co-lead author**

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**Lead author**

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**Lead author**

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**Major contributor**

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**Lead author**

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**Lead author**

71. **Dallas, D. C.**, Martin, W. F., Strum, J. S., Zivkovic, A. M., Smilowitz, J. T., Underwood, M. A., Affolter, M., Lebrilla, C. B., German, J. B. (2011). N-linked glycan profiling of mature human milk by high-performance microfluidic chip liquid chromatography time-of-flight tandem mass spectrometry. *Journal of Agricultural and Food Chemistry* 59(8), 4255 – 63.

**Lead author**

72. German, J. B., Zivkovic, A. M., **Dallas, D. C.**, Smilowitz, J. T. (2011). Nutrigenomics and personalized diets: What will they mean for food? *Annual Review of Food Science and Technology* 2, 97 – 123.

**Major contributor**

## ***C1.2 Books and Book Chapters***

1. Chan, L.<sup>a</sup>, Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** (Jan 2021). The enzymology of human milk. In Kelly, A., Bach Larsen, L. (Eds.), *Agents of Change: Enzymes in Milk and Dairy Products* (pp. 209 – 243). Springer. ISBN: 9783030554811  
**Senior author**
2. **Dallas, D. C.**, Sah, B. N. P.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, You X., Hilliard, M. A., Sela, D., Donovan, S. (Nov 2020). Nonprotein nitrogen and small peptides in human milk. In McGuire, M., O'Connor, D. (Eds.), *Human Milk: Sampling, Measurement and Content of Energy-Yielding Nutrients and Other Macromolecules* (pp. 299 – 336). Elsevier. ISBN: 9780128153505.  
**Lead author**
3. **Dallas, D. C.**, Nielsen, S. D.<sup>b</sup> (2018). Milk peptidomics to identify functional peptides and for quality control of dairy products. In Schrader, M., Fricker, L. (Eds.), *Peptidomics—Methods and Protocols* (Vol. 1719, pp. 223 – 240). Springer.  
**Lead author**
4. **Dallas, D. C.**, German, J. B. (2017). Enzymes in human milk. In Isolauri E., Sherman P., Walker W. (Eds.), *Intestinal Microbiome: Functional Aspects in Health and Disease* (pp. 129 – 36). Basel, Switzerland: Karger Publishers. ISBN: 3318060305  
**Lead author**
5. **Dallas, D. C.**, Meyrand, M., Barile, D. (2014). Chapter 2 Production and bioactivity of bovine milk oligosaccharides. In Moreno, F. J., Sanz, M. L. (Eds.), *Food Oligosaccharides: Production, Analysis and Bioactivity*. Ames: Wiley-Blackwell. ISBN: 9781118426494  
**Lead author**
6. Lange, M., Lee, H., **Dallas, D. C.**, Le Parc, A., Nobrega, J. M., Barile, D. (2014). Determining functional properties and sources of recently identified bioactive food components: oligosaccharides, glycolipids, glycoproteins and peptides. In Alfen, N.K.V. (Ed.), *Encyclopedia of Agriculture and Food Systems*. Oxford: Academic Press.  
**Major contributor**

## ***C1.3 Non-Refereed Publications***

1. Protein Metrics with Kim, B. J., **Dallas, D. C.** (2020). Technical Brief. Automated data filtering for rapid sample comparison of human milk glycoproteins. Published on the website of Protein Metrics, a mass spectrometry software company.  
**Major contributor**
2. Robinson, R. C.<sup>d</sup>, **Dallas, D. C.**, Barile, D. (2014). Nutritional platforms for dairy peptides. *The World of Food Ingredients*.  
**Major contributor**

3. **Dallas, D. C.** (2012). Digestomics of human milk: towards improved feeding of premature infants. Dissertation.

**Lead author**

#### ***C1.4 Papers Under Review at Refereed Journals***

1. Narasimhan, S. R., Jegatheesan, P., Lueangsakulthai, J., Flores, C., Huang, A., Anderson, C., Misra, S., Dallas, D. C., Song, D. Immunoglobulins in Human Milk and Serum of Women with SARS-CoV-2 During Pregnancy. Under review at *Frontiers in Pediatrics*, Neonatology section. **Major contributor**
2. Kuhfeld, R.<sup>a</sup>, Eshparih, H., Kim, B. J., Kuhfeld, M., Atamer, Z., **Dallas, D. C.** Identification of Bitter Peptides in Aged Cheddar Cheese by Crossflow Filtration-based Fractionation, Peptidomics, Statistical Screening and Sensory Analysis. Under review at *Food Chemistry*. **Senior author**
3. Nielsen, S. D.<sup>b</sup>, Liang, N.<sup>b</sup>, Rathish, H., Kim, B. J.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Koh, J.<sup>b</sup>, Qu, Y.<sup>a</sup>, Schulz, H.-J., **Dallas, D. C.** Bioactive milk peptides: An updated comprehensive overview and database. Under review at *Critical Reviews in Food Science and Nutrition*. **Senior author**

#### ***C1.5 Refereed Conference Proceedings***

1. **Dallas, D. C.**, Guerrero, A., German, J. B., Lebrilla, C. B., Barile, D. (2014). Milk peptidomics across infant digestion (vol. 248). *Abstracts of Papers of the American Chemical Society*.  
**Lead author**
2. Sivamani, R. K., Burney, W., Sharma, S., Killer, G., **Dallas, D. C.**, German, J. B., Isseroff, R. R. (2014). Lipoproteins and bovine milk peptides stimulate lipogenesis and inflammatory response in human sebocytes. Albuquerque, NM: *Society for Investigative Dermatology*.  
**Major contributor**
3. **Dallas, D. C.**, Guerrero, A., Khaldi, N., Parker, E., Castillo, P., Underwood, M., Bevins, C., Barile, D., German, J. B., Lebrilla, C. B. (2014). Peptidomic profiling of human and bovine milk and across infant digestion (1 supplement ed., vol. 28, pp. 622.5). *FASEB J*  
**Lead author**
4. **Dallas, D. C.**, Guerrero, A., Khaldi, N., Barile, D., German, J. B., Lebrilla, C. B. (2013). Naturally occurring peptides in human milk: Identification and evidence for antibacterial action (1 supplement ed., Vol. 27, pp. 629.1). *FASEB J*  
**Lead author**

## ***C2. Professional Meetings, Symposia and Conferences***

### ***C2.1 Invited Presentations***

1. **Dallas, D. C.**, Wai, B.<sup>a</sup> Survival of bioactive milk proteins across digestion in preterm infants fed human milk. International Milk Genomics Consortium Conference. Cork, Ireland. September 6-8, 2023.
2. **Dallas, D. C.** Structural and Functional Changes of Bioactive Proteins in Donor Human Milk Treated by Vat-Pasteurization, Retort Sterilization, Ultra-High-Temperature Sterilization, Freeze-Thawing and Homogenization. Webinar for Prolacta Biosciences. Invited oral presentation to 366 participants. Virtual. May 18, 2023.
3. **Dallas, D. C.** Human and Bovine Milk Proteins and Peptides Across Processing and Digestion. Invited talk for Nutrition Division at Cornell University. April 10, 2023.
4. **Dallas, D. C.** Structural and Functional Changes of Bioactive Proteins in Donor Human Milk Treated by Vat-Pasteurization, Retort Sterilization, Ultra-High-Temperature Sterilization, Freeze-Thawing and Homogenization. Invited oral presentation for University of Virginia Health System Neonatal Intensive Care Units. Virtual. March 29 and 31, 2023.
5. **Dallas, D. C.** Structural and Functional Changes of Bioactive Proteins in Donor Human Milk Treated by Vat-Pasteurization, Retort Sterilization, Ultra-High-Temperature Sterilization, Freeze-Thawing and Homogenization. Hot Topics in Neonatology. Invited lunch keynote presentation. Washington, D. C. December 6, 2022.
6. **Dallas, D. C.** Human milk processing and protein bioactives. Invited oral presentation. National Institutes of Child Health and Development Science Friday, presentation to director. November 18, 2022.
7. Kuhfeld, R.<sup>a</sup>, **Dallas, D. C.** Analysis of Bitter Peptides in Aged Cheddar Cheese. Invited oral presentation. American Cheese Society conference: Session on Controlling bitterness in cheese production. Portland, OR. July 22, 2022.
8. Angima, G.<sup>a</sup>, Park, S.H., **Dallas, D. C.** Colonic adaptation to lactose consumption in lactase nonpersistent individuals: the role of the gut microbiome and microbial metabolome in graded, incremental exposure to lactose and prebiotics. Invited oral presentation. BUILD Dairy Annual Meeting, Utah State University, Provo, Utah. June 14-17, 2022.
9. Kuhfeld, R.<sup>a</sup>, Atamer, Z., **Dallas, D. C.** Identifying peptide and protease contributors to cheese bitterness. Invited oral presentation. BUILD Dairy Annual Meeting, Utah State University, Provo, Utah. June 14-17, 2022.

10. Adler, S.<sup>a</sup>, **Dallas, D. C.** Effect of in vivo digestion on the anti-inflammatory bioactivity of glycomacropeptide and whey protein isolate. Invited oral presentation. BUILD Dairy Annual Meeting, Utah State University, Provo, Utah. June 14-17, 2022.
11. Qu, Y.<sup>a</sup>, Park, S. H., **Dallas, D. C.** Effect of Daily Consumption of Bovine Kappa-Casein Glycomacropeptide on Gut Health of People with IBS. Invited oral presentation. BUILD Dairy Annual Meeting, Utah State University, Provo, Utah. June 14-17, 2022.
12. Dallas, D. C. Human and Bovine Milk Protein Digestion and Bioactives. Invited oral presentation. University of Wisconsin, Madison, Department of Food Science. June 8, 2022.
13. Dallas, D. C. Overcoming Challenges in Analytics of Milk Proteins and Peptides and their Digestome. **Invited keynote oral presentation.** Annual International Milk Genomics Consortium ROS Workshop: From Bench to Practice: Milk Proteins and Peptides: Challenges and Successes of Scalability, Analytics and Navigating Regulatory. Virtual session. June 1, 2022.
14. Dallas, D. C. Digestion of human and bovine milk bioactive proteins. Invited oral presentation. University of Massachusetts, Amherst, Department of Nutrition. May 26, 2022.
15. Dallas, D. C., Human milk protein digestion in infants. Invited oral presentation. Oregon Pediatric Nutrition Practice Group meeting. April 12, 2022.
16. Dallas, D. C. Digestive survival of human proteins and release of antimicrobial and immunomodulatory milk peptides in infants. Center for Global Child Health Research Symposium. Portland, Oregon. April 12-14, 2022.
17. Dallas, D. C. Benefits of Dairy Proteins Beyond Nutrition. Invited oral presentation. Oregon Dairy Industries Conference, Salem, OR. April 12, 2022.
18. Dallas, D. C. Research Updates of Milk Protein Research. USDA Multistate Workgroup Annual meeting. March 7, 2022.

-----**post-tenure application**-----

19. Qu, Y.<sup>a</sup>, **Dallas, D. C.** Effect of Daily Consumption of Bovine Kappa-Casein Glycomacropeptide on Gut Health of People with IBS. Invited oral presentation. BUILD Dairy Annual Meeting, Boise State University, Boise, Idaho. September 8, 2021.
20. Olson, W.<sup>a</sup>, **Dallas, D. C.** Effect of Bovine Kappa-Casein Glycomacropeptide on the Gut Immune System. Invited oral presentation. BUILD Dairy Annual Meeting, Boise State University, Boise, Idaho. September 8, 2021.



21. Angima, G.<sup>a</sup>, **Dallas, D. C.** Colonic microbial and metabolic adaptation to galactooligosaccharide and lactose consumption in lactose-intolerant individuals. Invited oral presentation. BUILD Dairy Annual Meeting, Boise State University, Boise, Idaho. September 8, 2021.
22. Kuhfeld, R.<sup>a</sup>, **Dallas, D. C.** Analysis of Bitter Peptides in Aged Cheddar Cheese. Invited oral presentation. BUILD Dairy Annual Meeting, Boise State University, Boise, Idaho. September 9, 2021.
23. Adler, S.<sup>a</sup>, **Dallas, D. C.** Effects of In Vivo Digestion on the Anti-Inflammatory Bioactivity of Glycomacropeptide and Whey Protein Isolate. Invited oral presentation. BUILD Dairy Annual Meeting, Boise State University, Boise, Idaho. September 9, 2021.
24. Dallas, D. C. Bioactivity of Bovine Milk Glycomacropeptide in the Human Gut. Invited Oral Presentation. American Dairy Products Institute's Dairy Ingredient Technology Forum. Reno, Nevada. October 25 – 26, 2021.
25. Dallas, D. C. The science behind animal and other sources of bioactive ingredients in the context of assessing function and safety of infant formula. Invited Oral Presentation. Joint NIH-FDA workshop "Exploring the science surrounding the safe use of bioactive ingredients in infant formula: considerations for an assessment framework." September 24 – 25, 2021. <https://www.nichd.nih.gov/about/meetings/2021/092321>. Recording: <https://videocast.nih.gov/watch=42547?jwsourc=cl>
26. Dallas, D. C. Milk protein digestion and bioactivity. Session: "Feeding the Gut: What Drives a Healthy Gut?" Invited oral presentation. American Chemical Society (ACS) Fall 2021 National Meeting. August 22 – 26, 2021.
27. Dallas, D. C. Milk protein and peptide bioactive discovery and collaborative projects with Phibro. Phibro Animal Health Corporation research meeting. Corvallis, Oregon. August 17, 2021.
28. Dallas, D. C. Session: "Bioavailability and Targets of Milk Bioactive Peptides and Proteins." Outstanding Early-Career Investigator Speaker Award, International Milk Genomics Consortium. June 15 – 17, 2021.
29. Dallas, D. C. Digestive Survival of Milk Proteins and Release of Antimicrobial and Immunomodulatory Milk Peptides. Invited oral presentation. American Oil Chemists' Society (AOCS) Annual Meeting & Expo. May 3 – 14, 2021. <https://doi.org/10.21748/am21.435>
30. Dallas, D. C. Identifying Differences in the Release of Bioactive Milk Peptides across the Intestinal Tracts between Term and Preterm Infants. Invited oral presentation. Gerber Foundation Board or Directors Meeting. February 18, 2021.

31. Dallas, D. C. Milk Interactions: Proteins, Peptides, Enzymes. Breastmilk Ecology: Genesis of Infant Nutrition (BEGIN Project). National workgroup on human milk and lactation research to help guide future national research directions. National Institutes of Health. January, 29, 2021. <https://www.nichd.nih.gov/research/supported/begin>  
**Steering committee member**
32. Dallas, D. C. Research Update: Milk Protein Digestion and Bioactivity. USDA Multistate Workgroup W4002 Annual Meeting (virtual). January 27, 2021.
33. Dallas, D. C. Understanding Human and Bovine Milk Digestion. Invited oral presentation. CPHHS Research Seminar. November 20, 2020.
34. Beverly, R.<sup>a</sup>, Scottoline, B., **Dallas, D. C.** Milk Peptides in the Intestinal Tract of Breast-Milk Fed Infants Have Antimicrobial and Bifidogenic Activity. Invited oral presentation. International Milk Genomics Consortium (remote conference). October 14, 2020.
35. Dallas, D. C. Human Milk and Infant Health. Invited oral presentation. Science Pub Corvallis. March 9, 2020. <http://terra.oregonstate.edu/science-pub-covallis/>
36. Dallas, D. C. Milk Protein Digestion and Bioactive Peptide Release in Term and Preterm Infants. Invited Oral Presentation. FASEB Science Research Conference: The Origins and Benefits of Biologically Active Components in Human Milk Conference. July 21 – 26, 2019.
37. Qu, Y.<sup>a</sup>, **Dallas, D. C.** Digestion of Bovine Kappa-Casein Glycomacropeptide. Invited oral presentation. BUILD Dairy Annual Meeting, Utah State University, Logan, Utah. May 23, 2019.
38. Dallas, D. C. What Happens to Milk Proteins in the Digestive System? A Search For Bioactive Peptides. Invited Oral Presentation. Food Science and Technology Department Research Seminar, Oregon State University. May 7, 2019.
39. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** Systematic Examination of Glycoprotein/Glycopeptide Extraction Methods and MS/MS Fragmentation Techniques for Human Milk Glycoproteomics. Invited oral presentation. 8<sup>th</sup> International Glycomics Symposium, Daejeon, Korea. November 7 – 8, 2019.
40. Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** Tracking the Release and Survival of Human Lactoferrin Peptides across the Infant. Invited Oral Presentation. 14<sup>th</sup> International Conference on Lactoferrin Structure, Function and Applications. Robert Beverly awarded \$1,000 travel scholarship. Lima, Peru. November 4 – 8, 2019.
41. Dallas, D. C. Determining Oral Immunoglobulin Stability within the Infant Digestive Tract. Invited Oral Presentation. Gates Foundation Synthetic Colostrum Meeting, Bill and Melinda Gates Foundation, Boston, MA. July 25 – 26, 2018.

42. Demers-Mathieu, V.<sup>b</sup>, Underwood, M. A., Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** The Survival of Human Milk Immunoglobulins across Postprandial Time in the Premature Infant Stomach. Invited poster with travel award. American Society for Nutrition, Boston, MA. June 9 – 12, 2018.
43. Dallas D. C. A2 milk: What's Real and What Does the Science Say? Invited oral presentation. Oregon Dairy Industries Conference, Salem, OR. April 10, 2018.
44. Dallas, D. C. Milk Protein Digestion and Bioactive Peptide Release in Term and Preterm Infants. Invited Oral Presentation. International Milk Genomics Consortium, Sacramento, CA. November 13 – 15, 2018.
45. Demers-Mathieu, V.<sup>b</sup>, Underwood, M. A., Beverly, R. L.<sup>a</sup>, Nielsen, S. D.<sup>b</sup>, **Dallas, D. C.** Comparison of Human Milk Immunoglobulin Survival during Gastric Digestion between Preterm and Term Infants. Invited oral presentation. International Milk Genomics Consortium, Sacramento, CA. November 13 – 15, 2018.
46. Dallas, D. C. Milk Bioactives in Infant Digestion. Invited oral presentation. Linus Pauling Institute Research Seminar, Linus Pauling Institute, Corvallis, OR. October 25, 2018.
47. Demers-Mathieu, V.<sup>b</sup>, Underwood, M.A., Beverly, R. L.<sup>a</sup>, **Dallas, D. C.** Comparison of Human Milk Immunoglobulin Survival during Gastric Digestion between Preterm and Term Infants. Invited poster with travel award. International Society for Research in Human Milk and Lactation, Kanagawa, Japan. October 6 – 11, 2018.
48. Dallas, D. C. Digestion of Milk Protein in Infants and Bioactive Peptides. Invited oral presentation. USDA W3002 Annual Meeting, USDA, Tucson, AZ. February 8, 2018.
49. Dallas, D. C. Milk Proteins and Quantified Proteomics. Invited oral presentation. NIH Workshop on Human Milk Composition—Biological, Environmental, Nutritional, and Methodological Considerations, NIH NIDDK National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, Maryland. November 16, 2017.
50. Drud Nielsen, S.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, Qu, Y.<sup>a</sup>, **Dallas, D. C.** Milk Bioactive Peptide Database: Utilization and Novel Visualization. Invited oral presentation. Conference on milk composition, functional genomics and health aspects, Larkollen, Norway. November 20, 2017.
51. Dallas, D. C. Determining oral Immunoglobulin Stability Within the Infant Digestive Tract via Peptidomics, Proteomics and ELISA. Invited oral presentation. Gates Foundation Synthetic Colostrum Meeting, Bill and Melinda Gates Foundation, Boston, MA. October 4, 2017.

52. Dallas, D. C. Milk Protein Digestion in Premature Infants and Bioactive Peptide Discovery. Invited oral presentation. International Milk Genomics Consortium, Quebec City, Canada. September 27, 2017.
53. Drud Nielsen, S.<sup>b</sup>, Beverly, R. L.<sup>a</sup>, Qu, Y.<sup>a</sup>, **Dallas, D. C.** Milk Bioactive Peptide Database: A Comprehensive Milk Bioactive Peptide Database and Novel Visualization. Invited oral presentation. International Milk Genomics Consortium, Quebec City, Canada. September 27, 2017.
54. Dallas, D. C. OSU Nutrition Update, Moore Center, Corvallis, OR. Milk Protein Digestion in Premature Infants: A Peptidomics and Enzyme Analysis Approach. Invited oral presentation. February 23, 2017.
55. Dallas, D. C. Milk Protein Digestion in Premature Infants: A Peptidomics and Enzyme Analysis Approach. Invited oral presentation. Linus Pauling Institute Research Seminar, Linus Pauling Institute, Corvallis, OR. December 8, 2016.
56. Dallas, D. C. Breast Milk Protein Digestion in Premature Infants. Invited oral presentation. CPHHS Research Seminar, CPHHS, Corvallis, OR. December 2, 2016.
57. Demers-Mathieu, V.<sup>b</sup>, **Dallas, D. C.** Impact of the Degree of Prematurity and Time Postpartum on Milk Protease Activity in the Infant Stomach. Invited oral presentation. International Milk Genomics Consortium, Davis, CA. September 29, 2016.
58. Dallas, D. C. Peptidomics of Milk Digestion In Vivo. Invited oral presentation. International Milk Genomics Consortium Conference, Sydney, Australia. October 2015.
59. Dallas, D. C. Milk Peptidomics. Invited oral presentation. Agricultural and Food Chemistry Division Young Scientist Award Symposium, Agricultural and Food Chemistry Division of ACS, San Francisco, CA. June 2014.
60. Dallas, D. C. What 200 Million Years of Evolution Can Teach Us about Food Structure and Health. Invited oral presentation. International Dairy Federation conference, Melbourne, Australia. Lactation: March 2014.
61. Dallas, D. C. Peptidomics of Bovine Milk and Whey and Human Digestion. Invited oral presentation. International Milk Genomics Consortium Conference, Davis, CA. October 2013.
62. Dallas, D. C. Mechanisms by Which Human Milk Peptides and N-Glycans Shape the Infant Intestinal Microbiota. Invited oral presentation. UC Davis Clinical and Translational Science Center Annual Funding Retreat, UC Davis. September 2013.
63. Dallas, D. C. Identification of Naturally Occurring Bioactive Peptides in Intact Human Milk and Gastric Samples in Infants. Invited oral presentation. International Milk

Genomics Consortium, International Milk Genomics Consortium, Wageningen, The Netherlands. October 2012.

### ***C2.2 Peer-Reviewed Conference Presentations***

1. Kelson, E., Sugden, C., Liang, N.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Hussein Mohamed, Joy Waite-Cusic, David Dallas, Adam Higgins. Microfluidic UV-C Treatment of Human Milk to Inactivate Pathogens. Biomedical Engineering Society Meeting. Seattle, Washington. October 11-14, 2023. Poster presentation.
2. Wai, B.<sup>a</sup>, Kim, B. J.<sup>b</sup>, Liang, N.<sup>b</sup>, Scottoline, B. S., Dallas, D. C. Quantification of human milk protein survival across the infant gastrointestinal tract using nano LC/Orbitrap MS. American Society for Mass Spectrometry Conference. Houston, Texas, June 4-8, 2023.
3. Mohamed, H., Kilgore, S., Liang, N.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Lowder, A., Dallas, D. C., Waite-Cusic, J. Comparing the sensitivity of *Listeria monocytogenes* to high pressure processing and Ultraviolet-C in cow's milk and human's milk. American Society for Microbiology Annual Meeting. Houston, Texas, June 15-19, 2023. Poster presentation.
4. Zhang Y., Kuhn, M. Yung, C., Kim, B. J.<sup>b</sup>, Armstrong, R. J., Dallas, D. C., Scottoline, B. P., Andres, S. F. Human milk extracellular vesicles survive neonatal human digestion. International Society for Extracellular Vesicles 2023 Annual Meeting. Seattle, WA. May 17-21, 2023.
5. Pung, R.<sup>c</sup>, Liang, N.<sup>b</sup>, Dallas, D. C. Preserving Human Milk Proteins: Studying Ultraviolet light as an alternative pasteurization method. American Society for Biochemistry and Molecular Biology. Seattle, Washington, March 2023.
6. Partridge, C., Paullin, T., Kim, B. J.<sup>b</sup>, Dallas, D. C., Williams, J., McGuire, M., McGuire, M. Variability in Abundance and Timing of Bovine- and Soy-Derived Peptides in Human Milk after Maternal Soy Beverage and Bovine Milk Consumption. International Society for Research on Human Milk and Lactation Annual Conference. Panama. October 24-28, 2022.
7. Gogel, A., Bull, K., Kim, B. J.<sup>b</sup>, Dallas, D. C., William, J., McGuire, M., McGuire, M. Human milk total protein and proteomics vary within a feed and over day. International Society for Research on Human Milk and Lactation Annual Conference. Panama. October 24-28, 2022.
8. Liang, N.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Mohamed, H., Waite-Cusic, J., **Dallas, D. C.** High-pressure processing preserves bioactive proteins in human milk to a higher extent compared with Holder pasteurization. International Milk Genomics Consortium 2022 Symposium. Davis, CA. October 18 – 20, 2022.
9. Liang, N.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Mohamed, H., Waite-Cusic, J., **Dallas, D. C.** Determination of the effect of high-pressure processing conditions on bile salt-stimulated lipase activity in

human milk. International Milk Genomics Consortium 2022 Symposium. Davis, CA. October 18 – 20, 2022.

10. Qu, Y.<sup>a</sup>, **Dallas, D. C.** Bovine caseinomacropeptide (CMP): mass spectrometric characterization, digestive survival in adults and the in vivo bioactivity in adults with irritable bowel syndrome. International Milk Genomics Consortium 2022 Symposium. Davis, CA. October 18 – 20, 2022.
11. Kuhfeld, R.<sup>a</sup>, Atatmer, Z., **Dallas, D. C.** Identification of Bitter Peptides in Aged Cheddar Cheese. Literature References and a Novel Experimental Approach. American Dairy Science Association. Kansas City, Kansas. June 20, 2022.
12. Narasimhan, S. R., Jegatheesan, P., Lueangsakulthai, J.<sup>b</sup>, Flores, C., Huang, A., Patel, R., Anderson, C., Misra, S., **Dallas, D. C.**, Song, D. Immunoglobulins in Breast Milk of Women with SARS-CoV-2 During Pregnancy and Maternal Serum Immunoglobulins at Delivery. American Academy of Pediatrics conference. Anaheim, CA. October 7-11, 2022.
13. Hussein, M., Liang, N.<sup>b</sup>, Burroughs, S. Lowder, A., Kim, B. J.<sup>b</sup>, Waite-Cusic, J., **Dallas, D. C.** High Pressure Processing To Inactivate Neonatal Pathogens *Cronobacter Sakazakii* And *Listeria Monocytogenes* In Human Donor Milk. ASM Microbe. June 9-13, 2022.
14. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** Survival of infant formula N-glycoproteins across simulated infant gastrointestinal digestion. Poster presentation. ASMS Conference on Mass Spectrometry and Allied Topics. Minneapolis, MN. June 5-9, 2022.
15. Liang, N.<sup>b</sup>, **Dallas, D. C.** Structural and functional changes of bioactive proteins in human milk treated by vat-pasteurization, retort sterilization, ultra-high-temperature sterilization and homogenization. Oral presentation. 9<sup>th</sup> International Conference on Nutrition & Growth. Virtual. March 17-19, 2022.
16. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** Survival of intact human milk proteins across heat treatments and homogenization. Poster presentation. 9<sup>th</sup> International Conference on Nutrition & Growth. Virtual. March 17-19, 2022.

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17. Qu, Y.<sup>a</sup>, **Dallas, D. C.** LC-MS/MS Analysis of Glycomacropeptide from Whey Protein Isolate. 2020 American Dairy Science Association Annual Meeting, Dairy Foods: Chemistry section. West Palm Beach, Florida. June 21 – 24, 2020.
18. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** Systematic Examination of Protein/Glycopeptide Extraction Methods and MS/MS Fragmentation Techniques for Monitoring Human Milk Glycoproteins Survival across Preterm Infant Digestion. Houston, TX. ASMS Conference on Mass Spectrometry and Allied Topics. May 31 – June 4, 2020.

19. Chen, Y.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Fantuzzi, G., **Dallas, D. C.** Peptidomics Analysis Reveals Digestion-Released Peptides from Colostrum are Associated with In Vitro Inflammation and Cytotoxicity Suppression. Poster presentation. FASEB Science Research Conference: The Origins and Benefits of Biologically Active Components in Human Milk Conference. July 21 – 26, 2019.
20. Chen, Y.<sup>b</sup>, Kim, B. J.<sup>b</sup>, Fantuzzi, G., **Dallas, D. C.** Proteomics Analysis Reveals Digestion-Resistant Proteins from Colostrum and Their Associated Cellular Responses. Poster presentation. FASEB Science Research Conference: The Origins and Benefits of Biologically Active Components in Human Milk Conference. July 21 – 26, 2019.
21. Demers-Mathieu, V.<sup>b</sup>, Huston, R., Brian Scottoline, **Dallas, D. C.** Digestion of Maternal Immunoglobulins Specific to Influenza A Virus from Mother's Own Breast Milk and Donor Breast Milk in Preterm Infants. Oral presentation. Pediatric Academic Societies Meeting. April 27 – 29, 2019.
22. Beverly, R. L.<sup>a</sup>, Nielsen, S. D.<sup>b</sup>, Underwood, M. A., **Dallas, D. C.** Release of Milk Peptides within the Infant Stomach and Possible Developmental Relevance. Poster presentation. International Milk Genomics Consortium, Sacramento, CA. November 13 – 15, 2018.
23. Gan, J.<sup>d</sup>, Zheng, J., Krishnakumar, N., Beverly, R. L.<sup>a</sup>, **Dallas, D. C.**, German, J. B. Dynamic Human Milk Proteolytic System Releases Specific Peptides from Alpha-Lactalbumin in Response to pH. Poster presentation. International Milk Genomics Consortium, Sacramento, CA. November 13 – 15, 2018.
24. Dallas, D. C. Milk's Naturally Occurring Peptides. Experimental Biology, Dietary Bioactives Poster Competition, Boston, MA. Published in proceedings. April 2013.
25. **Dallas, D. C.**, Guerrero, A., Khaldi, N., Barile, D., German, J. B., Lebrilla, C. B. Naturally Occurring Peptides in Human Milk: Identification and Evidence for Antibacterial Action. Experimental Biology, American Society of Nutrition, Boston, MA. Published in proceedings. April 1, 2013.
26. Dallas, D. C. Peptidomics for Identification of Naturally Occurring Bioactive Peptides in Intact Human Milk and Comparison of Gastric Proteolytic Degradation in Term and Premature Infants. Poster presentation. Human Proteome Organization Conference, Boston, MA. September 2012.
27. Dallas, D. C. Comparative N-linked Glycomics of Human Milk. Poster presentation. International Milk Genomics Consortium Conference, Davis, CA. October 2010.

### ***C2.3 Non-peer-reviewed Conference Presentations***

1. Ahmed, E.<sup>c</sup>, Liang, N.<sup>b</sup>, Dallas, D. C. The Concentration of MCAF/MCP-1 Protein in Human Milk Treated with HoP, HPP, and UV-C Treatments. Celebration of Undergraduate Excellence Symposium. May 18, 2023.
2. Vellanki, S.<sup>c</sup>, Benson, P.<sup>a</sup>, Dallas, D. C. Proteins Prevalent in Aged Cheddar Cheese. Celebration of Undergraduate Excellence Symposium. May 18, 2023.
3. Mckelvey, A.<sup>c</sup>, Liang, N.<sup>b</sup>, Dallas, D. C. Macrophage Inflammatory Protein 1-Beta In Human Milk. Celebration of Undergraduate Excellence Symposium. May 18, 2023.
4. Pung, R.<sup>c</sup>, Liang, N.<sup>b</sup>, Dallas, D. C. Determination of Minimal Ultraviolet-C Parameters that Ensure Preservation of Immunoglobulins. Celebration of Undergraduate Excellence Symposium. May 18, 2023.
5. Gannet, B.<sup>c</sup>, Liang, N.<sup>b</sup>, Haas, J.<sup>a</sup>, Dallas, D. C. Effects of HP, HPP, and UVC Treatment on Human Donor Milk Protein Content. Celebration of Undergraduate Excellence Symposium. May 18, 2023.
6. Sheng, M.<sup>c</sup>, Afifah, F.<sup>c</sup>, Dallas, D. C. Development of Training Materials for New Students. Celebration of Undergraduate Excellence Symposium. June, 2022.
7. Liang, N.<sup>b</sup>, **Dallas, D. C.** Creating Highly Digestible, Bioavailable Protein from Microalgae via Fermentation. Ignite Colloquium. January 22, 2021.

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8. McAllister, E.<sup>c</sup>, **Dallas, D. C.** Antimicrobial Peptides and Immunological Effects of Milk within Infant Digestion. Celebrating Undergraduate Excellence Symposium. May 21, 2020.
9. Tan, Y. H.<sup>c</sup>, Baez, S.<sup>c</sup>, **Dallas, D. C.** Continuous Maintenance of Euglycemia in Premature Infants. Winners of the Undergraduate Poster Competition. Oregon Bioengineering Symposium. November 22, 2019.
10. Quinn, M.<sup>c</sup>, Chhing, A.<sup>c</sup>, **Dallas, D. C.** Transport of Human Milk Peptides Derived from In Vitro and In Vivo Digestion across a Model of the Human Intestinal Epithelium. Poster presentation. Oregon Bioengineering Symposium. November 22, 2019.
11. Sah, B. N. P.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Koh, J.<sup>b</sup>, Liang, N.<sup>b</sup>, **Dallas, D. C.** Ignite Colloquium, The Research Accomplishments and Scientific Discoveries of CPHHS Postdoctoral Fellows. 4 oral presentations: 1) Baidya Sah: Effect of Digestion on Functional Activity of Palivizumab in the Infant Gastrointestinal Tract; 2) Jiraporn Lueangsakulthai: The Survival of Palivizumab and Naturally Occurring Anti-Respiratory Syncytial Virus F Protein Antibodies across Infant Digestion; 3) Jeewon Koh: Extraction and Analysis of Bioactive Glycomacropptide by Mass Spectrometry; 4) Ningjian Liang: Omics Approaches for the Study of Infant Intestinal Ecosystem Exposed to Human Milk Peptides. November 17, 2019.



12. Kim, B. J.<sup>b</sup>, **Dallas, D. C.** Systematic Examination of Glycoprotein/Glycopeptide Extraction Methods and MS/MS Fragmentation Techniques for Human Milk Glycoproteomics. Oral presentation. 11<sup>th</sup> Asia Community of Glycoscience and Glycotechnology Conference, Busan, Korea. November 11 – 14, 2019.
13. Sah, B. N. P.<sup>b</sup>, Lueangsakulthai, J.<sup>b</sup>, Hauser, B.R.<sup>c</sup>, Scottoline, B. P., Pastey, M. K., **Dallas, D. C.** Methods for Purifying Immunoglobulins from Human Milk and Infant Digestates for Viral Inhibition Assays. Poster presentation. Postdoc Research Symposium, Oregon State University. October 2, 2019.
14. Hauser, B. R.<sup>c</sup>, **Dallas, D. C.** Effect of Digestion on Functional Activity of Palivizumab in the Infant Gastrointestinal Tract. Oral presentation. OSU 2019 Summer Undergraduate Research Symposium. September 19, 2019.
15. Yeo, J.<sup>c</sup>, **Dallas, D. C.** Impact of UVC sterilization Technique on Donor Milk in Maintaining Bile Salt Stimulated Lipase Activity. Poster presentation. OSU 2019 Summer Undergraduate Research Symposium. September 19, 2019.
16. Solis, U.<sup>c</sup>, **Dallas, D. C.** The Digestion of Milk Peptides Inside an Infant Stomach and their Bioactive Functions. Poster presentation. OSU 2019 Summer Undergraduate Research Symposium. September 19, 2019.
17. Scottoline, B., **Dallas, D. C.** Novel Insights into Neonatal Protein Digestion. Vermont Oxford ONSITE Conference, Oregon Health & Sciences University, Portland, OR. May 18, 2019.
18. Ocana, U. S.<sup>c</sup>, **Dallas, D. C.** Analysis of Endogenous Glycopeptides in Human Milk. OSU Celebration of Undergraduate Excellence, Oregon State University, Corvallis, OR. May 14, 2019.
19. Paluska, M.<sup>c</sup>, **Dallas, D. C.** Stability of Palivizumab in Milk at 1, 2, and 24 hours at 37 C, 4 C, and Room Temperature. OSU Celebration of Undergraduate Excellence, Oregon State University, Corvallis, OR. May 14, 2019.
20. Yeo, J.<sup>c</sup>, Lane, K.<sup>c</sup>, **Dallas, D. C.** Stability of Palivizumab in the Infant Gastrointestinal Tract. OSU Celebration of Undergraduate Excellence, Oregon State University, Corvallis, OR. May 14, 2019.
21. Victor, A.<sup>c</sup>, Waite-Cusic, J., **Dallas, D. C.** Impact of Alternative Donor Breast Milk Sterilization Techniques on Bile Salt-Stimulated Lipase Activity. Poster presentation. Summer Undergraduate Research Symposium, Oregon State University, Corvallis, OR. September 13, 2018.

22. Johnson, G. D.<sup>c</sup>, Sepp, A.<sup>c</sup>, Handley, Q. M.<sup>c</sup>, **Dallas, D. C.** Premature Infant Glucose Control System. Oral presentation. Summer Undergraduate Research Symposium, Oregon State University, Corvallis, OR. September 13, 2018.
23. Hollenbeck, K.<sup>c</sup>, **Dallas, D. C.** Nutritional Comparison of Intrauterine and Extrauterine Sources and Preterm Infant Growth. Poster presentation. OSU Celebration of Undergraduate Excellence, Oregon State University, Corvallis, OR. May 19, 2018.
24. Demers-Mathieu, V.<sup>b</sup>, Qu, Y.<sup>a</sup>, Beverly, R. L.<sup>a</sup>, Underwood, M. A., **Dallas, D. C.** Survival of Milk Immunoglobulins during Gastric Digestion in Premature Infants. Oral Presentation. OSU-UO Postdoctoral Research Symposium, Oregon State University, Corvallis, OR. October 4, 2017.
25. Ahmad, Z.<sup>c</sup>, Demers-Mathieu, V.<sup>b</sup>, **Dallas, D. C.** Role of Milk Proteases on Gastric Digestion of Human Breast Milk in Premature and Term Infants. Poster presentation. OSU Celebration of Undergraduate Excellence, Oregon State University, Corvallis, OR. May 19, 2017.
26. Robertson, C.<sup>c</sup>, Demers-Mathieu, V.<sup>b</sup>, Nielsen, S. D.<sup>b</sup>, **Dallas, D. C.** Effects of Different Heat Treatments on Total Protease and Plasmin Activity in Human Milk. Poster presentation. OSU Celebration of Undergraduate Excellence, Oregon State University. May 16, 2016.
27. Dallas, D. C. Naturally Occurring Functional Milk Peptides. Oral presentation. Milk Bioactives Group, UC Davis. January 2013.
28. Dallas, D. C. Digestomics of Human Milk: Towards Improved Feeding for Premature Infants. Oral presentation. Graduate Group of Nutritional Biology Student Symposium, Davis, CA. May 2012.
29. Dallas, D. C. Peptidomics of Human Milk and Digestion in Term and Premature Infants. Oral presentation. Interdisciplinary Graduate and Professional Symposium, Davis, CA. April 2012.
30. Dallas, D. C. Human Milk Protein and Glycoprotein Degradation in the Infant Stomach. Oral presentation. Milk Bioactives Group, UC Davis. November 2011.
31. Dallas, D. C. Towards Comparative N-Linked Glycomics and Glycopeptidomics of Human Milk. Poster presentation. Robert Mondavi Institute Brewery and Winery Poster Competition, Davis, CA. January 2011.
32. Dallas, D. C. Digestion of Milk and Formula in the Premature Infant. Oral presentation. Interdisciplinary Graduate Symposium, Davis, CA. April 2010.
33. Dallas, D. C. Infant Glycopeptide Digestome of Breast Milk and Formula Fed Infants. Oral presentation. Milk Bioactives Group, UC Davis. April 2010.

34. Dallas, D. C. In Vivo Infant Glycopeptide Digestome of Term and Premature Infants. Oral presentation. Designated Emphasis in Biotechnology Retreat, Napa, CA. March 2010.

### ***C3. Grants and Contract Support***

#### ***C3.1 Current***

1. Scottoline, B. (PI), **Dallas, D. C.**, Andres, S., Bobe, G. (co-Is), Di, Y. (co-Is). Discovering bioactivities of peptides released from human milk proteins in the preterm infant intestine. NIH R01. \$3,282,741 requested. April 1, 2023 – March 31, 2028. **6 percentile—will be funded—submitted Just-in-Time.**
2. **Dallas, D. C. (PI)**, Scottoline, B., Chen, Y., Di, Y. (co-Is). Effects of Human Milk Handling Practices on Peptide Release and Bioactivity in the Preterm Infant Intestine. NIH R01. R01HD097367. \$3,748,653. September 1, 2021 – August 31, 2026.
3. Dallas, D. C. (**PI**). Determining the Immunomodulatory Activity of Bovine Milk-derived Protein Hydrolysates in Human Immune Cells. Hilmar Ingredients. \$24,807. Mar 1, 2022 – Mar 1, 2023.
4. **Dallas, D. C. (PI)**, Joanna Haas (trainee). Effects of spray drying and freeze drying on the retention of bioactive proteins in whey. BUILD Dairy with Hilmar Ingredients. \$140,941. September 1, 2022 – September 1, 2024.
5. **Dallas, D. C. (PI)**, Marie Biondi (trainee). Novel method development for detection of glycomacropeptide fragments in human blood. BUILD Dairy with Glanbia. \$140,941. September 1, 2022 – September 1, 2024.
6. **Dallas, D. C. (PI)**, Paige Benson (trainee). The effects of different adjunct cultures on bitterness prevention in model cheddar cheese. BUILD Dairy with Tillamook. \$140,941. September 1, 2022 – September 1, 2024.
7. **Dallas, D. C. (PI)**, Sumiwon (Noom) Sutantawong (trainee). Survival of intact whey proteins and release of bioactive peptides across gastrointestinal digestion in adult consumers. BUILD Dairy with Oregon Dairy and Nutrition Council, Dairy Farmers of Washington. \$140,941. September 1, 2022 – September 1, 2024.
8. Dallas, D. C. (**PI**). Determine the bioavailability and immunomodulatory activity of Tatua hydrolysates (Phase III). Tatua Co-operative Dairy Company. \$119,999. September 1, 2022 – September 1, 2023.

9. Dallas, D. C., **(PI)**. Survival of bioactive milk protein across digestion in preterm infants fed with fresh human milk plus bovine milk fortifier. Bobbie Labs. \$50,000. September 1, 2022 – February 28, 2023.
10. Pitino, M. (trainee awardee), Dallas, D. C. **(PI)**. Proteomic and peptidomic profiling of donor human milk after high pressure processing and dynamic in vitro digestion simulating the preterm infant. International Society for Human Milk and Lactation. \$100,000. February 6, 2023 – February 6, 2024.
11. Dallas, D. C. **(PI)**. Center for Milk Bioactives. Research Advancement Seed Funds. Oregon State University. \$50,000. June 30, 2023 – July 1, 2024.

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12. **Dallas, D. C. (PI)**, Higgins, A. (co-I), Waite-Cusic, J. (co-I). Can High Pressure Processing (HPP) and Ultraviolet-C Irradiation (UV-C) Treatment Preserve Donor Milk Bioactive Protein Structure and Function Better than Holder Pasteurization? NIH R01. R01HD106140. \$2,480,757. September 1, 2021 – September 30, 2026.
1. **Dallas, D. C. (PI)**, Scottoline, B. P. (co-I), Di, Y. (co-I). Can High Pressure Processing of Donor Milk Improve Lipid Absorption and Growth in Preterm Infants Compared with Holder Pasteurization? Gerber Foundation. \$350,000. January 1, 2021 – December 30, 2023.
2. **Dallas, D. C. (PI)**, Adler, S.<sup>a</sup> (Trainee). Effects of In Vivo Digestion on the Anti-Inflammatory Bioactivity of Glycomacropeptide and Whey Protein Isolate. BUILD Dairy (Building University-Industry linkages through Learning and Discovery for the dairy industry in the western region) in collaboration with Glanbia, \$140,129. August 1, 2021 – August 31, 2023.
3. **Dallas, D. C. (PI)**, Qu, Y. (trainee), Park, S. H. (co-PI). Effect of Daily Consumption of Glycomacropeptide on Human Gut Health. BUILD Dairy with Agropur. \$207,803. September 1, 2020 – August 31, 2023.
4. **Dallas, D. C. (PI)**, Russell Kuhfeld (trainee). Predicting the Evolution of Cheese Bitterness via Peptidomics, Protease-Focused Proteomics and Microbial Sequencing. BUILD Dairy with Tillamook. \$136,651. January 1, 2021 – January 1, 2023.
5. Dallas, D. C. **(PI)**. Collection of GI samples with and without a protein meal and determination of dilution factor. Codexis, Inc.. \$245,176. November 1, 2021 – November 1, 2024.
6. Dallas, D. C. (PI). Helaina Inc. Comparison of recombinant and naturally occurring human milk lactoferrin survival across simulated infant/adult digestion. \$211,439. 5/1/2023 – 9/30/2023.

### ***C3.2 Under Review***

1. **Dallas, D. C. (PI)**, Scottoline, B. (PI), Pitino, M. (PI), Bobe, G. (co-I). Survival and bioactivity of proteins in human milk across preterm infant digestion. NIH R01. 1 R01 HD114770-01. \$3,721,968 requested. 4/1/2024 – 3/31/2029.
2. **Dallas, D. C. (PI)**, Liang, N. (co-I). Effect of bovine milk lactoferrin supplementation on influenza vaccine response in just-weaned mice as a model for young children. National Dairy Council. \$331,254 requested. 2 years.
3. **Dallas, D. C. (PI)**. Milk peptides across digestion. Abbott Nutrition. \$149,244 requested. 1 year.
4. **Dallas, D. C. (PI)**. Helaina, Inc. Collection of gastric and intestinal digests and ex vivo digestion of recombinant human milk lactoferrin, naturally occurring milk lactoferrin, and bovine milk lactoferrin. \$143,896 requested. 3/1/2023 – 2/29/2024.
5. **Dallas, D. C. (PI)**. TurtleTree. Recombinant lactoferrin purity and peptidomics. \$ \_\_\_\_\_ requested.
6. **Dallas, D. C. (PI)**. Simulator of the Human Microbial Ecosystem (SHIME): A dynamic in vitro digestion and fermentation system. Oregon State University Research Equipment Reserve Fund. \$200,000 requested.

### ***C3.3 In Development for Submission/Resubmission***

1. **Dallas, D. C. (PI)**, Scottoline, B., Di, Y. (co-Is). Pancreatic enzyme supplementation to enhance nutrient digestion and absorption in preterm infants. NIH R01. \$2,988,397 requested. January 1, 2023 – December 31, 2026. **Planning to revise and resubmit for March 2023.**
2. **Dallas D. C. (PI)**, Scottoline, B. P. (co-PI), Waite-Cusic, J. (co-I). Can Feeding High Pressure Processing-treated Human Donor Milk to Preterm Infants Enhance Lipid Digestion and Absorption and Improve Growth in Comparison with Holder Pasteurized Milk? NIH R01. \$3,403,423 will be requested. NIH R01. **Planning to revise and resubmit for March 2023.**

### ***C3.4 Completed***

1. Dallas, D. C. (**PI**). Immunomodulation of Cow's Milk, Blood and Stool Measured by Proteomics. Phibro. \$46,507. January 1, 2021 – December 31, 2021.
2. Dallas D. C. (PI), Kim, B. J. (co-I). Subcontract from Ibrahim, Z. at Donald and Barbara Zucker School of Medicine at Hofstra/Northwell. Detection of Maillard reaction products in milk. September 1, 2021 – December 31, 2022. \$2,878 for phase I testing.
3. Meier, C. S. (PI), Dallas, D. C. (Co-I). A low-flow UHPLC for the Orbitrap Fusion Lumos Mass Spectrometer. Research Equipment Reserve Fund. \$89,105 requested.
4. **Dallas, D. C. (PI)**. Contract with University of Idaho to measure the human milk proteome. Visiting PhD Student Alexandra Gogel awarded the International Society for Research in

Human Milk and Lactation's Trainee Expansion Program Trainee Travel Fund Award. \$6,459. Mar 2022 – June 2022.

5. **Dallas, D. C. (PI)**. Contract with University of Idaho to measure milk peptides. \$36,193. 3/1/2022 – 6/30/2022.
6. **Dallas, D. C. (co-PI)**, Park, S. H. (co-PI), Gloria Angima (trainee). Colonic Adaptation To Lactose Consumption In Lactase Non-Persistent Individuals: The Role of the Gut Microbiome and Microbial Metabolome in Graded, Incremental Exposure to Lactose And Prebiotics. BUILD Dairy with Oregon Dairy and Nutrition Council. \$141,802. September 1, 2020 – August 31, 2022.
7. Dallas, D. C. (**PI**). Peptide profile and immunomodulatory activity of Tatua ingredients (Phase II). Tatua Co-operative Dairy Company. \$125,802. September 1, 2021 – September 1, 2022.
8. Dallas, D. C. (**PI**). Structural and Functional Changes of Bioactive Protein in Human Milk Treated by Retort Sterilization, Ultra-High Temperature (UHT) Pasteurization and Homogenization. Prolacta Bioscience. \$84,169 invoiced for Aims 1-2. Additional \$25,000 invoiced for Aims 1-2 for supplies and additional \$10,157 invoiced for salary for Aim 1. Additional \$23,303 invoiced for publications from Aim 1-2. \$194,082 for full contract. April 1, 2021 – April 1, 2022.
9. Dallas, D. C. (**PI**). Glycopeptides in Formula across Infant Digestion. Morinaga Milk Industry. \$40,123. February 8, 2021 – February 1, 2022.
10. Dallas, D. C. (**PI**). Determining the Immunomodulatory Activity of Bovine Milk-derived Transforming Growth Factor Beta and Protein Hydrolysates in Human Immune and Intestinal Epithelial Cells. Hilmar Ingredients. \$56,000. December 1, 2020 – December 31, 2021.

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11. Chen, Y. (PI), **Dallas, D. C. (co-investigator)**, Holyoke, L. (co-investigator), Scottoline, B. (co-investigator). Reducing Maternal Stress in Mothers of Preterm Infants Using a Mindfulness-based Intervention. National Institute of General Medicine. \$60,000. OSU component: \$13,500. July 15, 2020 – June 30, 2021.
12. **Dallas, D. C. (PI)**, Olson, W.<sup>a</sup> (Trainee). Immunomodulatory Effect of Bovine Kappa-Casein Glycomacropeptide. BUILD Dairy (Building University-Industry linkages through Learning and Discovery for the dairy industry in the western region) in collaboration with Glanbia, \$131,012. September 1, 2019 – August 31, 2021.
13. **Dallas, D. C. (co-PI)**, Higgins, A. (co-PI). Device for Optimizing Premature Infant Glucose Balance via Continuous Glucose Monitoring and Data-controlled Glucose Infusion. Consortium for Technology and Innovation in Pediatrics (CTIP) Catalyzing

Pediatric Innovation (CPI) Portfolio Company. \$5,000 in company development assistance. September 1, 2019 – August 31, 2021.

14. **Dallas, D. C. (PI)**, Liang, N. (co-PI), Beverly, R. L. (entrepreneurial lead). Development of Edible Microalgae Protein with Improved Digestibility. Advantage Accelerator Innovation Development Fund. \$15,000. October 1, 2020 – October 1, 2021.
15. Dallas, D. C. (**PI**). Proteonourish LLC. Oregon State University, NSF Innovation Corps Sites program. \$3,000. November 2020 – April 2021.
16. Dallas, D. C. (**PI**). Identification of Casein Phosphopeptides and Other Bioactive Peptides in Infant Formula. Tatua Co-operative Dairy Company. \$25,000. November 1, 2020 – December 31, 2021.
17. **Dallas, D. C. (co-PI)**, Park, S. (co-PI), Rackerby, B.<sup>a</sup> (Trainee). Effect of GMP on the Adult Human Microbiome and Microbial Metabolome Ex Vivo and In Vivo. BUILD Dairy (Building University-Industry linkages through Learning and Discovery for the dairy industry in the western region) in collaboration with Glanbia, \$131,012. September 1, 2019 – August 31, 2021.
18. Dallas, D. C. (**PI**). SARS-CoV-2-specific Antibodies in Human Milk of Mothers with and without COVID-19. Testing Services Agreement with Santa Clara Valley Medical Center. \$60,383.50. June 1, 2020 – June 1, 2021.
19. Beverly, R. L.<sup>a</sup> (trainee), Scottoline, B., **Dallas, D. C. (mentor)**. Oregon Clinical and Translational Research Institute, NIH OSLER TL1 award. \$40,022 per year. September 1, 2019 – August 31, 2021.
20. **Dallas, D. C. (PI)**, Qu, Y.<sup>a</sup> (Trainee). Digestion, Absorption Immunomodulation of Casein Glycomacropptide in Adult Humans. BUILD Dairy (Building University-Industry linkages through Learning and Discovery for the dairy industry in the western region) in collaboration with Glanbia, \$127,536. September 1, 2018 – August 31, 2020.
21. Dallas, D. C. (**PI**). Analysis of GMP Digestion in Healthy Adults. Arla Food Ingredients. \$106,581. September 1, 2019 – December 31, 2020.
22. **Dallas, D. C. (PI)**, Scottoline, B. (Co-I). Peptidomics of In Vivo Digested Human Milk Proteins to Reveal Novel Immunomodulatory and Antimicrobial Peptides within the Infant Intestinal Tract. USDA NIFA, 2018-67017-27521. \$500,000. March 1, 2017 – February 28, 2021.
23. **Dallas, D. C. (PI)**, Scottoline, B. (Co-I). Determining Limitations in Premature Infant Protein Digestion Capacity via Digestomic Analysis. Gerber Foundation, 2017-1586. \$300,000. January 1, 2017 – December 31, 2020.

24. **Dallas, D. C. (co-PI)**, Higgins, A. (co-PI). PediaNourish LLC. Advantage Accelerator Innovation Development (AID) Fund. Oregon State University, \$15,000. February 1, 2020 – August 1, 2020.
25. **Dallas, D. C. (co-PI)**, Stevens, F. (co-PI), Shulzhenko, N. (co-PI), Morgun, A (co-PI). Role of *Bifidobacteria infantis* Colonization in Preterm Infants on Milk Protein Utilization and Microbial Protein Fermentation. Joint Interdisciplinary Research Grant Program—Division of Health Sciences and Linus Pauling Institute, Oregon State University, \$20,000. The goal is to examine the extent to which probiotic supplementation can benefit preterm infants by decreasing the release of inflammatory metabolites from bacterial protein fermentation. July 1, 2018 – June 30, 2019.
26. Schinkel, E. R. (PI), Nelson, E. R. (PI), **Dallas, D. C. (co-I)**, Human Milk Concentration Device; Point of Care Technology for Feeding Preterm Infants in Intensive Care. NIH NICHD SBIR. R43HD098737. \$16,680 for subcontract. \$223,627 total. April 1, 2019 – October 1, 2020.
27. Park, S. (PI), **Dallas, D. C. (co-PI)**, Waite-Cusic, J. (co-PI). Anaerobic Chamber and Microplate Reader. Research Equipment Reserve Fund (RERF). Oregon State University, \$16,940. May 1, 2019.
28. **Dallas, D. C. (PI)**, Scottoline, B. (co-I). Immunoglobulin Stability in the Infant Gut. Bill & Melinda Gates Foundation, OPP118364, \$815,354. November 1, 2017 – February 28, 2020.
29. Dallas, D. C. (**PI**). Deciphering the Function of Naturally Occurring Peptides in Human Milk. K99/R00 Pathway to Independence Career Award. NIH NICHD, 4R00HD079561-03. \$1,074,000. January 1, 2016 – December 30, 2018.
30. **Dallas, D. C. (co-PI)**, Higgins, A. (co-PI). Optimizing Premature Infant Glucose Balance via Continuous Glucose Monitoring and Data-Controlled Glucose Infusion. Joint Interdisciplinary Research Grant Program—College of Engineering & College of Public Health and Human Sciences, Oregon State University, \$10,000. July 1, 2017 – June 30, 2019.
31. **Dallas, D. C. (co-PI)**, Waite-Cusic, J. G. (co-PI). Alternatives Techniques for Ensuring Microbiological Safety of Donor Breast Milk to Improve Enzyme Activity, Digestion and Premature Infant Growth. Joint Interdisciplinary Research Grant Program—College of Agriculture & College of Public Health and Human Sciences, Oregon State University, \$10,000. The goal was to develop an automatic feedback system for glucose control in preterm infants to prevent dysglycemia-induced neurological damage. July 1, 2017 – June 30, 2019.
32. Grutzmacher, S. K. (co-PI), **Dallas, D. C. (co-PI)**, Tomayko, E. J. (co-PI), Training/Continuing Education. University Graduate Laurels Block Grant for the



Nutrition Program. Oregon State University, \$24,678. September 1, 2018 – June 30, 2019.

33. Grutzmacher, S. K. (co-PI), **Dallas, D. C. (co-PI)**, Tomayko, E. J. (co-PI), Training/Continuing Education. University Graduate Laurels Block Grant for the Nutrition Program. Oregon State University. \$12,150. September 1, 2017 – June 30, 2018.
34. **Dallas, D. C. (co-PI)**, Li, Y. (PI), Glycohub (PI), Barile, D. (co-PI), Mills, D. (co-PI), German, B. (co-PI). Enzymatic Modification of Isolated Bovine Milk Oligosaccharides to Mimic Human Milk Oligosaccharides with Increased Antimicrobial Activity. NIH NICHD, SBIR, 1R43HD083981-01 \$150,000. April 1, 2015 – March 31, 2016.
35. Dallas, D. C. (**PI**). Identification of Peptides in Whey Permeate from Bovine Milk Colostrum. Contract with La Belle Inc., \$5,000. December 1, 2014 – December 1, 2015.
36. Dallas, D. C. (**PI**). Sensory-guided Fractionation of a Bioactive Casein Hydrolysate to Determine Bitter Peptides. Foods for Health, Ireland. \$10,000. September 1, 2014 – December 31, 2015.
37. **Dallas, D. C. (PI)**, Barile, D. (co-PI), de Moura Bell, J. (Co-PI). Development of a Bioprocessing Method to Recover Antimicrobial and Anti-Inflammatory Peptides from Dairy Waste Streams. UC Davis Sustainable AgTech Innovation Center Seed Fund Grant. \$25,000. July 1, 2014 – December 30, 2015.
38. **Dallas, D. C. (co-PI)**, Underwood, M. (PI), Zivkovic, A. (Co-PI). Mechanisms by Which Human Milk Peptides and N-Glycans Shape the Infant Intestinal Microbiota. Rosa B. Sherman/Clinical and Translational Science Center Pediatric Research Award. \$20,000. September 1, 2012 – June 30, 2013.

#### ***C.4. Patents Filed and In Process***

Patent disclosure: **Dallas, D. C.**, Higgins, A., “Intravenous Glucose Infusion System Based on Continuous Glucose Monitor Data to Optimize Blood Glucose Balance,” United States. (submit: May 24, 2017).

Provisional patent: **Dallas, D. C.**, Lebrilla C. B., Guerrero, A., German, J. B., Khaldi, N. “Antibacterial Peptides,” US 20140148378 A1, Provisional, United States. (application: March 1, 2013).

## **D. SERVICE**

### ***D1. School/Program-level Service***

Nutrition Advisory Committee (Search Committee) for Instructor in the Nutrition Program. November, 2021 – March, 2022.

#### **-----post-tenure application-----**

University Graduate Laurels Block Grant, Writer. December 1 – 15, 2017.

University Graduate Laurels Block Grant, Writer. December 1 – 12, 2016.

Undergraduate Scholarship Committee, Committee Member. February 2016.

### ***D2. College-level Service***

CPHHS Curriculum Committee (July 15, 2020 – September, 2022).

#### **-----post-tenure application-----**

CPHHS Reorganization Taskforce, Committee Member. Helped provide recommendations for reorganizing the administrative structure of the College of Public Health and Human Sciences (May, 2020 – December, 2020).

CPHHS Strategic Planning Team for Goal II: Graduate public health and human science professionals prepared to meet the complex health challenges of the 21<sup>st</sup> century, Committee Member. (September 15, 2018 – December 2018).

CPHHS Stakeholders Committee for Strategic Planning, Committee Member. (August 8, 2017 – December, 2018).

Search Committee for Nutrition Clinical Assistant Professor, Committee Member. (May, 2016).

Masters of Public Health-Nutrition Development Committee, Committee Member. (April – October, 2016).

### ***D3. University-level Service***

Advisory Committee, Oregon State University High-throughput Screening Facility. September 2019 – present.

Internal Oversight Committee for the Oregon State Mass Spectrometry Center Orbitrap Fusion Lumos, Committee Member. March 2018 – present.

Oregon State University Microbiome Initiative Workshop Committee, Committee Member.  
December 6, 2016 – present.

#### ***D4. Professional Service***

External Peer Reviewer for the University of Idaho Ph.D. Nutritional Sciences Program proposal. Required by the Idaho State Board of Education for all new doctoral-level programs. Feb 10, 2023.

Helaina, Inc. Synthetic human milk company. **Consultant.** December 1, 2021 – present.

International Milk Genomics Consortium Symposium on “Milk Bioactives.” Organizing Committee. Organizing starting October, 2021 for workshop in October, 2022.

International Milk Genomics Consortium workshop on “Bioactive Milk Peptides and Proteins: Regulatory, Scale-up and Analytics.” **Chair.** Organizing starting June 2021 for workshop in October, 2021.

NIH-FDA workshop member on “Exploring the science surrounding the safe use of bioactive ingredients in infant formula: considerations for an assessment framework.” September, 23-24, 2021.

#### **-----post-tenure application-----**

Scientific Advisory Board, **Member**, International Milk Genomics Consortium (IMGC).  
November 2020 – present.

NIH Committee on “Breastmilk Ecology: Genesis of Infant Nutrition: the BEGIN Project.” **Committee Member.** I was selected as a leader in the field to help assess the state of science and drive research directions in human milk. Ongoing monthly meetings with milk science experts. August 12, 2020 – present. <https://www.nichd.nih.gov/research/supported/begin>

NIH Committee on Human Milk Composition, **Committee Member**, Washington, D.C.  
Appointed by the NIH. October 6–7, 2017.

USDA Multistate Research Project W3002/W4002, “Nutrient Bioavailability - Phytonutrients and Beyond,” **Member.** Appointed. January 1, 2018 – present.

Nominating Committee for International Society for Research on Human Milk and Lactation (ISRHML), **Committee Member.** Appointed. December 6, 2017 – January 2018.

**Associate Editor**, *Frontiers in Nutrition*, *Nutrition Methodology* Editor. April 2017 – March 2019.

**Committee Member**, Foods for Health Institute, Davis, CA. (September 2012 - December 2015).

#### ***D4.1 Grant Reviewer***

1. NIH grant reviewer (February 2019; May 2020; **June 2022; June 2023**).
2. Reviewer for National Institute of Food and Agriculture's (NIFA) Exploratory Research program within the Agriculture and Food Research Initiative (AFRI), USDA (July 18 – August 1, 2019).
3. Botnar Research Centre for Child Health Research Grants (December 2021).
4. California Dairy Research Foundation, Research Grants (August 2021).
5. Israel Science Foundation, Personal Research Grants (May 2021).
6. Scientific Review Board of International Society for Research on Human Milk and Lactation (SRHML) Trainee Bridge and Travel Awards (June 24, 2019; November, 2021).
7. Technology Foundation STW, Dutch funding agency, Reviewer, Grant Proposals (October 2014).
8. UC Davis Postdoctoral Scholars Association Travel Grants, Reviewer, Grant Proposals (July 2013).

#### ***D4.2 Journal Reviewer***

I regularly review for discipline-based journals. I review approximately 10 to 15 manuscripts per year. I have reviewed for the following journals: American Journal of Clinical Nutrition, Journal of Nutrition, British Journal of Nutrition, Nutrition Reviews, Molecular Nutrition & Food Research, Nutrients, Current Developments in Nutrition, Analytical and Bioanalytical Chemistry, Plos ONE, Food and Function, Food Research International, Journal of Neonatal Biology, Journal of Pediatrics, BMC Pediatrics, Dairy Science and Technology, Journal of Dairy Science, International Journal of Food Science and Technology, Nucleic Acids Research, Peptides, Food Chemistry, Journal of Molecular Recognition, Nutrition: International Journal of Applied and Basic Nutritional Sci, Oncotarget, F1000 Research, Food and Bioproducts Processing, Food and Bioprocess Technology

#### ***D4.3 Professional Memberships***

1. International Milk Genomics Consortium, attend conferences and workshops. January 2008 – present. Scientific Advisory Board member 2022 – present.
2. National Center for Faculty Development and Diversity, participated in the Faculty Success Program and Post-tenure Pathfinders Program and attended workshops. December 2015 – present.
3. American Chemical Society, Attended conferences and workshops. April 2014 – present.
4. International Society for Research in Human Milk and Lactation, attend conferences, serve on election nominations committee. May 2013 – present.
5. American Society for Nutrition, member of Lactation Research Interest Section, attend conferences. November 2012 – present.
6. Human Proteome Organization, attend conferences and workshops. June 2012 – June 2016.

### ***D5. Service to the Public***

Lactalogics, Clinical and Scientific Advisory Board member. Lactalogics is a manufacturer of human donor breast milk. December 2020 – December 2022.

Northwest Mother's Milk Bank, Board member, Portland, OR. September 13, 2016 – March 2021.

International Milk Bank, Scientific advisory board member, Reno, NV. March 2015 – 2019.

## **E. Honors and Professional Recognition**

### ***Fellowships***

Biohealth Valley Fellowship. September 2022 – present.

### **-----post-tenure application-----**

K99/R00 Pathway to Independence Career Award, Eunice Kennedy Shriver Institute of Child Health & Development of the National Institutes of Health. May 1, 2014 – April 30, 2016. \$78,689 per year first 2 years (K99 phase). \$250,000 per year for final 3 years (R00 phase).

Agriculture and Food Research Institute Postdoctoral Fellowship, USDA National Institute of Food and Agriculture. August 1, 2012 – September 31, 2014. \$134,800 for 2 years.

Graduate Research Fellowship, National Science Foundation. September 1, 2010 – July 1, 2013. \$30,000/year stipend, plus tuition and travel expenses.

Fellowship for Training Program in Biomolecular Technology, National Institutes of Health 2-T3-GM08799. October 1, 2009 – September 30, 2010). \$20,976 stipend, plus tuition, plus \$300 travel expenses.

Graduate Scholars Fellowship, Nutrition Department, UC Davis. September 1, 2008 – September 1, 2009. \$23,000 stipend, plus tuition.

### ***National and International Awards and Honors***

Outstanding Early-Career Investigator Speaker Award, International Milk Genomics Consortium, Session on "Bioavailability and Targets of Milk Bioactive Peptides and Proteins." June 15 – 17, 2021.

American Chemical Society Young Scientist Research Award Finalist, American Chemical Society, National. August 2014. \$1,000.

Student Travel Award, International Symposium on Milk Genomics and Human Health, International. October 2012.

Health Education Major of the Year Award, American Association for Health Education, National. June 2008.

### ***University and Community Awards and Honors***

2020 – 2021 James and Mildred Oldfield/E.R. Jackman Team Award. College of Agricultural Sciences, OSU. With the BUILD Team: Joy Waite-Cusic, Juyun Lim, Chris Curtin, Si Hong Park, Michael Qian, Robin Frojen, Sheri Cole, David Dallas, Nadia Streletskaya and Hadi Eshpari. \$4,000 prize.

Selected to be featured in an article in Terra (OSU's research magazine) "Baby love: Researchers seek to improve the odds for premature infants" (<http://terra.oregonstate.edu/2020/02/baby-love/>). February 2020.

Kinsella Memorial Prize, Awarded for most outstanding dissertation in the College of Agricultural and Environmental Sciences, University of California, Davis. June 2013. \$3,000.

Post-doctoral Scholar Association Travel Award, University of California, Davis, Post-doctoral Scholar Association, University. March 2013. \$1,000.

First place in Graduate Student Research Poster Competition, Robert Mondavi Institute for Wine and Food Science, University of California, Davis, University. January 2011. \$750.

Jastro Shields Research Scholarship Award, University of California, Davis, University. Received three times: June 2009, June 2010 and June 2011. \$8,000.

President's Honor Roll, Rice University, Rice University, University. June 2008.

## **F. Selected Faculty Development Activities Attended**

1. Research Impacts and Advancement Academy. A structured opportunity to develop skills for leading large transdisciplinary grant proposals. Oregon State University. September 2022 – June 2023.
2. Post-tenure Pathfinders Program, a 15-week intensive coached program to enhance faculty productivity and focus career planning post-tenure, National Center for Faculty Development and Diversity. June – Aug 2022.
3. Entering Mentoring Workshops 1 and 2. An OSU program to develop graduate student mentoring skills. May 2022.

-----post-tenure application-----

4. Advantage Accelerator, a 10-week intensive program providing training for OSU researchers to establish privately held, high-growth entrepreneurial ventures. Oregon State University Advantage. January – March 2021.
5. Faculty Success Program, a 15-week intensive coached program to enhance faculty productivity, National Center for Faculty Development and Diversity. January – March 2020.
6. Workshop, “Course Design Institute” Center for Teaching and Learning, Oregon State University. Redesigned NUTR 605 seminar course to focus on graduate student. December 17 – 19, 2019.
7. Workshop, “Mental Health Training for Graduate Student Mentoring” from Michelle Ribeiro, CAPS, Oregon State University. May 2, 2019.
8. Workshop, “Coaching: A Process for Developing Talent” from Paul Biwan, Oregon State University. April 18, 2019.
9. Conference, “Oregon Dairy Industries Annual Meeting,” Salem, OR. April 9, 2019.
10. Workshop, “Advising for Advisors” from Karen Kelsky of the Professor Is In. Graduate School, Oregon State University. April 2, 2019.
11. Workshop, “Course Design Institute” Center for Teaching and Learning, Oregon State University. Redesigned NUTR 417 course and created design for new NUTR 699 on gut health and nutrition. March 26 – 28, 2019.
12. Workshop, “Undergraduate Student Success Summit,” Oregon State University. March 7, 2019.
13. New2OSU Teaching Academy, year-long program that develops teaching skills in new teachers. Includes 3 hours/week of workshops “teaching talks,” teaching mentoring and projects. Foci include course planning, active learning strategies, assessment, etc. Center for Teaching and Learning, Oregon State University. October 1, 2018 – June 30, 2019.
14. Workshop, “Faculty Success Symposium,” Academic Technology, Center for Teaching and Learning. September 14, 2018.
15. Workshop, “Teaching Talks,” Center for Teaching and Learning. October 25, 2016 – May 2017.
16. Workshop, “Grant Writers’ Seminar and Workshop,” College of Public Health and Human Sciences. March 11 – December 30, 2017.

17. Workshop, “Grant Writers’ Seminar and Workshop,” College of Public Health and Human Sciences. March 11 – December 30, 2016.
18. Workshop, “Advising Doctoral Students,” Oregon State University. October 13 – 14, 2016.
19. Workshop on commercialization of research/business design, “Iterate,” Oregon State University. April 2016 – May 2016.
20. Workshop, “Ag Innovation Entrepreneurship Academy,” University of California, Davis, Davis, CA. June 23 – 25, 2014.

## **G. Demonstrated commitment to diversity, inclusion and equity**

**DEI summary:** I consistently engage in learning opportunities and implement strategies in my teaching, research, service and administration role to enhance equity, inclusion, and diversity at OSU. In my classes, I work to implement techniques that can help make learning more equitable, like offering frequent, low-stakes formative assessments, providing clear outlines of key content that I go over in class with students and providing numerous avenues for participation. In my research, I have a highly diverse research team, and I work to ensure that all members are treated equitably and are supported to do their best work. As the Nutrition Undergraduate Program Director, I have worked to ensure that all voices are heard at our faculty meetings. I have also helped apply for grants to support diverse, underserved graduate students (USDA National Needs Fellowship, Graduate Laurels, NIH Supplement to Promote Diversity).

Workshop, “Diversity, Equity, Inclusion and Justice in Research.” Workshop conducted by the Office of Institutional Diversity in coordination with the Research Impacts and Advancement Academy focused on how to bring DEI concepts into our daily research practice and team management. Oregon State University. November 2022.

I led Nutrition faculty to create diversity, inclusion and equity-focused learning outcomes and assessments for all students in the undergraduate nutrition programs. March 2021.

Workshop, “Decoding Implicit Bias: Racism That Surfaces Despite Our Best Intentions (Social Justice Education Initiative Tier Two Next Level),” Oregon State University. May 18, 2021.

Workshop, “Balancing Advocacy and Empowerment: Culturally Competent Mentorship,” Oregon State University. Explores how to mentor undergraduates in ways that promote inclusion and belonging in research. January 28, 2021.

Member of the National Center for Faculty Development and Diversity, participated in the Faculty Success Program and attended workshops. December 2015 – present.

Applied for funding for graduate student fellowship program with heavy emphasis on recruitment and retention strategies for underrepresented minority students. Curtin (PI), **Dallas,**



**D. C. (co-PI)**, Waite-Cusic, J. (co-PI), Park S. H. (co-PI), Kovacevik, J. (co-PI), Kwon, J. (co-PI). Training scientists at the interface of food, microbiology, nutrition and data science to positively impact tomorrow's food systems. USDA National Needs Fellowship. \$262,500 requested. January 1, 2021 – January 1, 2024.

Workshop, "Social Justice Education Initiative," Oregon State University. September 22 – 26, 2016.

Workshop, "Search Advocate Training," Oregon State University. This training prepared participants to promote equity, validity, and diversity in OSU searches. August 11 – 12, 2016.

Workshop, "Examining White Identity in a Multicultural World," Oregon State University. January 8 – 9, 2016.

Signature:

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.