CURRICULUM VITAE

University of Idaho

NAME: Pedram Rezamand September 4, 2023
RANK / TITLE: Professor, Dairy Nutrition
DEPARTMENT: Animal, Veterinary and Food Sciences
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DATE OF TENURE/PROMOTION: March 2021

EDUCATION BEYOND HIGH SCHOOL:

Ph.D., Animal Science (nutrition), 2006, University of Connecticut, Storrs CT, USA
M.S., Animal Science (nutrition), 1995, Tehran, Iran
B.S., Animal Science, 1991, Tehran, Iran

EXPERIENCE

Teaching, Extension and Research Appointments:

- Professor, Dairy Nutrition, University of Idaho, Animal, Veterinary, and Food Sciences, March 2021-present.
- Associate Professor, Dairy Nutrition, University of Idaho, Animal, Veterinary, and Food Sciences, March 2014-March 2021.
- Assistant Professor, Dairy Nutrition, University of Idaho, Animal & Veterinary Science, October 2008-March 2014.
- Post-doctoral Research Associate, Animal & Veterinary Science, University of Idaho, 2008.
- Post-doctoral Research Associate, Large Animal Clinical Sciences, Michigan State University, 2007.
- Research/Teaching Assistant, Animal Science, University of Connecticut, 2001-2006.
- Faculty member, Animal Science Department, College of Agriculture and Natural Resources, Varamin Azad University, Varamin, Tehran, Iran, 1995-2000.
- Research Assistant (part time), Department of Animal Nutrition, Animal Science Research Institute of Iran, Karaj, Tehran, Iran, 1992-1995.

Academic Administrative Appointments:

- Animal & Veterinary Science Dept., Director of Graduate Studies, January 2015- September 2020
- Department of Animal Science, Technical and Vocational Education Center, Ministry of Agriculture, Tehran, Iran. Responsibilities included curriculum development for short-term professional training programs and certificates for animal science graduates (holding B.S. degree) as well as curriculum development for new two-year associate degree programs in **1)** Equine Science and **2)** Feed Technology. 1996- 2000 (part time).

Consulting:

Consultant for Racine Olson Nye Budge & Bailey law firm, providing expert opinion in "Sandy Hills Mink" case, 2012-2014.

TEACHING ACCOMPLISHMENTS

Areas of Specialization:
Ruminant Nutrition, Nutrient Metabolism, Nutritional Physiology, Metabolic Disorders, Experimental Design and Data Analysis

Courses Taught:
Course developed/taught during past ~13 years:

Undergraduate:

- **Feeds and Ration Formulation, AVS 306:** Spring semester (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, and 2023).
- **Ruminant Nutrition, AVS 411:** Spring semester (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023).
- **Science of Animal Husbandry:** (~5-6 guest lectures), AVS 209, Spring 2010, Spring 2011, Spring 2012, Spring 2013, Spring 2014, Spring 2015.
- Special Topics "Immunity and Inflammation", AVS 504**:** (Fall 2013, Fall 2014).
- Internship "Dairy Management and Practices"; AVS 398 (Fall 2013).
- Special Topics "Advanced Animal Feeds and Ration Formulation", AVS 404 (2011).
- Special Topics "Biology of Retinol-binding Protein", AVS 404 (2010).
- Special Topics "Lipid Metabolism and Inflammation", AVS 404 (2009).
- Undergraduate Research (2017, 2018, 2019, 2020, 2021, 2022, 2023)
- Advanced Human Nutrition & Metabolism (Fall 2019, Spring 2021)

Graduate:

- **Ruminant Nutrition AVS 511**: Spring semesters (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, and 2023).
- **Practical Methods in Analyzing Animal Science Experiments AVS 531** (offered every other year)**:** Summer 2010, Summer 2012, Summer 2014, Summer 2016, Fall 2018, Fall 2022.
- **Macronutrient Metabolism AVS 517** (offered alternative years)**:** summer 2011, summer 2013, summer 2015, Fall 2017, Fall 2019, Fall 2023
- **Graduate Seminar**, Spring 2016.

Internship:
AVS 498/598: Internship in Animal Feed Industry (3 credit; 2010-2015).

Students Advised:

Undergraduate Students **(total of 210)**
2009-none; 2010-three; 2011-ten; 2012-twenty; 2013-Twenty-four; 2014-Thirty-two; 2015-Twenty-four; 2016- Twenty-one; 2017- Fifteen; 2018- Twelve; 2019- Fifteen; 2020-Eighteen, 2021-sixteen; 2022-twenty. 2023-Sixteen

Graduate Students*:* **(total of 12 completed)**

1. Shannon L. Baze (Bradbury), M.S., Major Professor. "Effects of increased milking frequency on selected measures of mammary gland health, milk yield, and milk composition" Completed May 2010. Current position: Standard Nutrition.

2. Sarah E. Stout (Peterson), M.S., Major Professor. "Effects of dietary betaine on milk yield and milk composition of mid-lactating Holstein dairy cows" Completed December 2010. Current position: Lewiston Veterinary Clinic, Lewiston, ID.
3. Jason S. Watts, M.S., Major Professor. "Effects of dietary *trans*-fat, as compared with saturated fat, on selected measures of mammary gland health, milk yield and milk composition of early lactation Holstein dairy cows" Completed December 2011. Current position: Research Associate, Environmental Science Dept., Washington State University.
4. Cynthia M. Scholte, M.S., Major Professor. "Effect of elevated lipid mobilization on fatty acid composition of blood and immune cells in dairy cows". Completed December 2014. Current position: Fellow Scientist, Food & Drug Administration.
5. Jeffrey Chilson, M.S., Major Professor. Research area: Chemical and enzymatic treatments of low-quality forages. Completed November 2015. Current position: Extension Educator, Montana State University.
6. Chia-Yu Tsai, MS., Major Professor. Research area: lipid metabolism and inflammation in Holstein calves. Completed May 2016. Present position: Ph.D. candidate, University of Idaho.
7. Kirk C. Ramsey (DVM), M.S., Major Professor. Research area: Retinol binding protein and inflammation in periparturient dairy cows. Completed May 2016. Present position: private Veterinary Practice, Twin Falls ID.
8. Hao-Che Hung (DVM), M. S., Major Professor. Research area: Betaine digestibility and milk composition. Completed August 2018. Current position: Research Associate, University of Idaho.
9. Benjamin Tverdy (DVM), M.S. Major Professor. Research area: large calf herd health and nutrient metabolism. Completed December 2020. Currently at Feedlot Health Management Services by TELUS Agriculture.
10. Maeghan Steelreath, M.S. Major Professor. Research area: Dairy nutrition-direct fed microbial on production and health. May 2021. Currently at Liquid Feeds. Jerome ID
11. Chia-Yu Tsai, Ph.D. Major Professor. Research area: lipid metabolism and health in Holstein dairy cows and calves. Currently at BMI, Raleigh NC
12. Lucelia Preirra Moura, Ph.D. Co-Advisor, Research area: Enzymatic/essential oil additives for silage improvement (with State University of Parana, Brazil), Aug 2022. Currently a Research Associate, Animal, Veterinary, and Food Sciences, University of Idaho
13. Niloufar Nourmohammadi, M.S., Major professor, Research area: Food proteins, 2022-preseent
14. Hyrum Rasmussen, M.S., Co-Major professor (with Dr. Denise Konetchy), Research area: Calf nutrition/health, 2023-present
15. Mostafa Kamyabi, M.S. Co-Major professor (with Dr. Amy Skibiel), Research area: Wildfire smoke and dairy health/productivity, 2023-present

Serving on Graduate Committee: total of 21

1. Alexandra Pace, Ph.D., Major Professor: Dr. Amy Skibeil, *In progress*
2. Landon T. Sullivan, Ph.D., Major Professor: Dr. J. Sprinkle, *In progress*
3. Cody Ream, MS., Major Professor: Dr. G. Chibisa, *In progress*
4. Adamarie Marquez Acevedo, MS., Major Professor: Dr. Amy Skibeil, *Completed 2022*
5. Lauren Christensen, MS., Major Professor: Dr. D. Konetchy, *Completed 2022*
6. Kylee Elmore, MS., Major Professor: Dr. G. Chibisa, *Completed 2022*
7. Daniel Tsao, MS, Major Professor: Dr. M. Powell, *Completed 2022*

8. Ashly Anderson, MS, Major Professor: Dr. A. Skibeil, *Completed 2021*
9. Brook Luzzi, MS, Major Professor: Dr. M. Colle, *Completed 2021*
10. Joshua Peters, MS., Major Professor: Dr. M. A. McGuire, *Completed* 2020.
11. Avani Gorou, M.S., Major Professor: Dr. G. Murdoch, *Completed 2019*.
12. Allison Stevens, M.S., Major Professor: Dr. G. Chibisa, *Completed 2019*.
13. James Vineyards, M.S., Major Professor: Dr. G. Chibisa, *Completed 2018*.
14. Brent Hatch. M.S., Major Professor: Dr. M. A. McGuire, *Completed 2014*.
15. Britney Casperson. M.S., Major Professor: Dr. M. A. McGuire, *Completed 2013*.
16. Amy Keehner. M.S., Major Professor: Dr. C. Schneider, *Completed 2012*.
17. Sarah Reyes Paredes. M.S., Major Professor: Dr. M. A. McGuire, *Completed 2011.*
18. Cory Rill. M.S., Major Professor: Dr. M. A. McGuire, *Completed 2010*.
19. Joeng Min Choi. M.S., Major Professor: Dr. M. A. McGuire, *Completed 2010*.
20. Vahid Homayoni. M.S., Major Professor: Dr. M. Shivazad, *Completed 1999 (Iran)*.
21. S. Jamal Fatemi, M.S., Major Professor: Dr. M. Shivazad, *Completed 1998 (Iran).*

Mentoring

Visiting scholar/Postdoctoral fellow: **total of 8**

1. Mina Mahdaviyekta, Ph.D., teaching assistant professor (Iran), Sept. 2022-Aug. 2023
2. Bruna C. Agustinho, Ph.D., postdoctoral research associate; Jan 2021-Dec 2022
3. Lucelia de Moura Pereira, Ph.D. candidate, visiting scholar (Brazil); Sept. 2021-Sept. 2022
4. Hsin-Tai Tsia, Ph.D. candidate, visiting scholar (Taiwan); 2019-2020
5. Gamila Bohaliga, DVM, Ph.D., visiting scholar (Libya); 2019
6. Yi-Jin Shao, MS, visiting scholar (China); 2018
7. Yang Chen, Ph.D., visiting scholar (assistant professor, China); 2015-2016
8. Farhad Foroudi, Ph.D., visiting scholar (assistant professor, Iran); 2012 -2013

Faculty mentoring committee: **total of 7**

1. Da Chen (2022-2023), current position: assistant professor of food science, Food Sciences, Purdue University
2. Isabelle Molina de Almaida Tiexiera (2022-present), current position: assistant professor of food science, Animal, Veterinary, and Food Sciences, University of Idaho
3. Amy Skibiel (2019-present), current position: assistant professor of lactation physiology, Animal, Veterinary, and Food Sciences, University of Idaho
4. Dennis Konetchy (2018-2023), current position: assistant professor of small ruminant health, Animal, Veterinary, and Food Sciences, University of Idaho
5. Anne Roe (2019-2020) current position: assistant professor of nutrition, Family and Consumer Sciences, University of Idaho
6. Gwinyai E. Chibisa (2016-2019), current position: associate professor of ruminant nutrition, Animal, Veterinary, and Food Sciences, University of Idaho)
7. Anne. H. Laarman (2016-2019), current position: industrial research chair, Agriculture, Food, and Nutritional Sciences, University of Alberta

Undergraduate Research Trainees: total of 94

2009-four students; *2010*-six students; *2011*-eight students; *2012*-eight students; *2013*-six students; *2014*-five students; *2015*- six students; *2016*- five students; *2017*- seven students;

2018- five students; *2019*- six students; *2020*- twelve students, *2021*- nine students; *2022*- four students; 2023; three students

Workshops, Seminars, Invited Lectures: total of 18

18. **P. Rezamand**. 2019. Calf husbandry/management; Effects of serum total protein concentration on selected health measures (Bonn, Germany).

17. **P. Rezamand.** 2019. Calf/heifer management; Serum lipid-soluble vitamins of newborn calves in relation to the health status of dams during the periparturient period (Bonn, Germany).

16. **P. Rezamand.** 2019. Biology of transition cows; Relationship between nutrient metabolism and health measures in the Pacific Northwest dairy herds (Bonn, Germany).

15. **P. Rezamand.** 2018. Betaine; total tract digestibility, rumen characteristics, effect on productivity and milk composition (Pamplona, Spain).
14. **P. Rezamand.** 2018. Lipid metabolism, health, and productivity of high producing dairy cows (Bonn, Germany)
13. **P. Rezamand.** 2018. Oxidative stress, inflammatory response and lipid metabolism in dairy cows (Bonn, Germany).
12. **P. Rezamand.** 2017. Nutrients, health, and productivity: retinoids and retinol-binding protein (Bonn, Germany).
11. **P. Rezamand.** 2017. Lipid metabolism and selected measures of health during the periparturient period (Bonn, Germany)
10. **P. Rezamand.** 2017. Common experimental designs and statistical analyses in animal science; Part I (2- h mini workshop; Bonn, Germany)
9. **P. Rezamand.** 2017. Betaine as a dietary supplement in dairy cattle nutrition; digestibility and performance (Bonn, Germany).
8. **P. Rezamand.** 2017. Common experimental designs and statistical analyses in animal science; Part II (3- h mini workshop; Bonn, Germany).
7. **P. Rezamand.** 2016. Effect of elevated lipomobilization on innate immunity of the mammary glands and metabolism in periparturient dairy cows. NE 1048, multistate hatch projects/Mastitis research workers conference (Chicago, IL).
6. **P. Rezamand.** 2014. Effects of fat on dairy cows' health status. The 49th Pacific Northwest Animal Nutrition Conference (Vancouver, BC, Canada).
5. **P. Rezamand.** 2013. Effect of increased subcutaneous fat stores on fatty acid composition of blood lipid fractions and productive performance in periparturient dairy Holstein cows. The 6th Annual International Symposium on Agriculture (Athens, Greece).
4. **P. Rezamand.** 2012. Hepatic bovine retinol-binding protein and tumor necrosis factor-α. NE 1028, multistate hatch projects/Mastitis research workers conference (Chicago, IL).
3. **P. Rezamand.** 2011. Hepatic bovine retinol-binding protein and inflammation. NE 1028, multistate hatch projects/Mastitis research workers conference (Chicago, IL).
2. **P. Rezamand.** 2010. Retinol-binding protein and inflammation. NE 1028, multistate hatch project/Mastitis research workers conference (Athens, GA).
1. **P. Rezamand.** 2009. Interaction among energy status, retinol-binding protein and intramammary infections in periparturient dairy cows. Invited speaker, the 43rd annual Pacific Northwest Animal Nutrition Conference (Boise, ID).

Teaching/Advising Awards:

- Nominated for the University of Idaho Donald Crawford Graduate Faculty Mentoring Award (Spring 2023)
- Nominated for the University of Idaho Donald Crawford Graduate Faculty Mentoring Award (Spring 2022)
- Nominated for the University of Idaho Donald Crawford Graduate Faculty Mentoring Award (Spring 2021)
- University of Idaho Students Organization Advisor Award, 2019-2020
- AVS Departmental teaching award, nominated for the R.M. Wade Excellence in Teaching Award, 2018, CALS, University of Idaho.
- AVS Departmental teaching award, nominated for the R.M. Wade Excellence in Teaching Award, 2017, CALS, University of Idaho.
- AVS Departmental teaching award, nominated for the R.M. Wade Excellence in Teaching Award, 2016, CALS, University of Idaho.
- AVS Departmental teaching award, nominated for the R.M. Wade Excellence in Teaching Award, 2014, CALS, University of Idaho.

SCHOLARSHIP ACCOMPLISHMENTS

Publications - Refereed: 44 ***Corresponding Author: 27**

44. Pace, A., P. Villamediana, **P. Rezamand**, and A. L. Skibiel. 2023. Effects of wildfire smoke $PM_{2.5}$ on immunity, health, and metabolism of pre-weaned Holstein heifers. *J Animal Sci. In Press.*

43. Agustinho, B. C., A. Wolfe, C. Y. Tsai, L. P. de Moura, D. E. Konetchy, A. H. Laarman, and P. **Rezamand***. 2023. Effect of weaning age and pace on blood metabolites and inflammatory markers in Holstein dairy calves. *J Dairy Sci. In Press*

42. Agustinho, B., A. Mark, A. H. Laarman, D. Konetchy, and **P. Rezamand***. 2023. Effect of pH and lipopolysaccharide on tight junction regulators and inflammatory markers in intestinal cells as an experimental model of weaning transition in dairy calves. *JDS Communications*. *In Press*.

41. Wolfe, A., **P. Rezamand**, B. Agustinho, D. Konetchy, and A. H. Laarman. 2023. Effects of weaning strategies on health, hematology, and productivity in Holstein dairy calves. *J Dairy Sci. In Press.* https://doi.org/10.3168/jds.2022-22738

40. Hiltz, R. L., M., R. Steelreath, M. N. Degenshein-Woods, H. C. Hung, A. Aguilar, H. Nielsen, **P. Rezamand**, and A. H. Laarman. 2022. Effects of Saccharomyces cerevisiae boulardii (CNCM I-1079) on feed intake, blood parameters, and production during early lactation. *J Dairy Sci.* https://doi.org/10.3168/jds.2021-21740)

39. Agustinho, B. C., H. T. Hong, K. Blair, C. Y. Tsai, H. C. Hung, A. H. Laarman, and **P. Rezamand***. 2022. Preference, feeding behavior, and *in vitro* fermentation characteristics of pelleted feeds containing alkaline aqueous lignin by-product from paper processing in Holstein heifers. J. Agric Sci and Tech. A 12: 54-64 https://doi: 10.17265/2161-6256/2022.02.002

38. Peravian, M. Mirzaei-Alamouti, H. R., A. Patra, M. Vazirigohar, and **P. Rezamand***. 2022 Effects of altering the ratio and concentrations of polyunsaturated fatty acids in diets on milk production and energy balance of Holstein cows. *Applied Animal Sci.* 38:581–591. https://doi.org/10.15232/aas.2022-02310

37. Anderson, A., **P. Rezamand**, and A. Skibiel. 2022. Effects of wildfire smoke exposure on innate immunity, metabolism, and milk production in lactating dairy cows. *J Dairy Sci.* 105:7047-7060 (https://doi.org/10.3168/jds.2022-22135)

36. Corpron, M., A. Ahmadzadeh, **P. Rezamand**, and Q. Huo. 2021. Relationship between beef cow fertility and maternal immunity. *Applied Animal Science.* 37:733-737

35. Agustinho, B. C., K. C. Ramsey, C. E. Moore, C. Y. Tsai, C. M. Scholte 1, M. A. McGuire, and **P. Rezamand***. 2021. Effect of different combinations of dietary vitamin A, protein levels, and Monensin on inflammatory markers and metabolites, retinol-binding protein, and retinoid status in periparturient dairy cows. *Animals*: 11, 2605. https://doi.org/10.3390/ani11092605

34. Mirzaei-Alamouti, H. R., A. Mohammad, M. Vazirigohar, **P. Rezamand**, and M. Mansouryar.2021. Effect of protein level and grain source on performance and ruminal fermentation characteristics of primiparous Holstein cows. *J Agricultural Sci:* 158: 767-773 https://doi.org/10.1017/S0021859621000095

33. Vinyard, J., C. Myers, G. Murdoch, **P. Rezamand**, and G. Chibisa. 2021. Optimum grape pomace proportion in feedlot cattle diets: Ruminal fermentation, total-tract nutrient digestibility, nitrogen utilization, and blood metabolites. *J. Animal Sci.* https://doi.org/10.1093/jas/skab044

32. Stevens, A. V., K. Karges, **P. Rezamand**, A. H. Laarman, and G. E. Chibisa. 2021. Production performance and nitrogen metabolism in dairy cows fed supplemental blends of RUP and rumen protected-AA in low compared to high protein diets containing corn distillers' grains. *J. Dairy Sci.* 104:4134–4145.

31. Laarman, A. H., J. Watts, and F. Foroudi, and **P. Rezamand***. 2021. Effects of Dietary Protein and Vitamin A on Retinoids and Retinol Binding Protein in Periparturient Rats. *Int. J. Vitamins and Metabolism:* 1–7

30. Hung, H. C., C. Y. Tsao, G. E. Chibisa, M. Chahine, and **P. Rezamand***. 2020. Effect of betaine supplementation on total-tract digestibility, milk fatty acid composition, and production performance in Mid-lactating Holstein dairy cows. *J. Agric. Sci and Tech. A, 11: 237-246*

29. Tsai, C. Y. R. Hassan, H. C. Hung, T. Weber, W. J. Price, **P. Rezamand***, and Q. Huo. 2020. A Rapid Blood Test to Monitor the Immune Status Change of Dairy Cows and to Evaluate their Disease Risk during the Periparturient Period. Sensors International. https://doi.org/10.1017/S0022029920000941

28. Tsai, C. Y., F. Rosa, M. Bionaz, and **P. Rezamand***. 2020. Effects of 2,4-thiazolidinedione (TZD) on milk fatty acid profile and serum vitamins in dairy goats challenged with intramammary infusion of *Streptococcus uberis*. DOI: https://doi.org/10.1017/S0022029920000941

27. Dolatkhah, B., G. R. Ghorbani, M. Alikhani, F. Hashemzadeh, A. H. Mahdavi, A. Sadeghi-Sefidmazgi, H. Erfani, and **P. Rezamand***. 2020. Effects of hydrolyzed cottonseed protein

supplementation on performance, blood metabolites, gastrointestinal development, and intestinal microbial colonization in neonatal calves. *J. Dairy Sci 103: 5102-5117.*

26. Akhlaghi , B., G. R. Ghorbani, M. Alikhani , S. Kargar , A. Sadeghi-Sefidmazgi , H. Rafiee-Yarandi, and **P. Rezamand**. 2019. Effect of production level and source of fat supplement on performance, nutrient digestibility and blood parameters of heat-stressed multiparous Holstein cows. *J Animal Sci Technol 61:313-323*

25. Rafiee-Yarandi, H., M. Alikhani, G.R. Ghorbani, and **P. Rezamand***. 2019. Effects of dietary protein level and corn processing method on feeding behavior in lactating Holstein cows. *J Livestock Science, 221: 19-27.*

24. Hosseini, S. H., H. Mirzaei-Alamouti, M. Vazirigohar, E. Mahjoubi, and **P. Rezamand***. 2019. Effects of milk feeding procedures and straw levels on growth performance, blood metabolites, structural growth and feeding behavior of Holstein dairy calves. *J Animal Feeds Sci*ence *& Tech: 255; 114238.*

23. Rafiee-Yarandi, H., M. Alikhani, G.R. Ghorbani, M. Heydari, and **P. Rezamand***. 2019. Dietary protein level and corn processing method: Lactation performance, milk fatty acid composition, rumen and blood parameters of lactation dairy cows. *J Livestock Sci*ence, *221:95-104*.

22. Tsai, C.Y, **P. Rezamand*,** W. Louks**,** C. M. Scholte and M.E. Doumit. 2017. The Effect of dietary fat on fatty acid composition, gene expression and vitamin status in pre-ruminant calves. *J Animal Feed Science & Technology 229: 32- 42*.

21. Scholte, C.M., **P. Rezamand*,** Z. M. Amiri, K.C. Ramsey, C. Tsai, and M.A. McGuire. 2017. The effects of elevated subcutaneous fat stores on fatty acid composition and gene expression of pro-inflammatory markers in periparturient dairy cows. *J Dairy Sci 100:2104-2118*.

20. Chilson, J. M., **P. Rezamand***, M. E. Drewnoski, W. Price, and C. W. Hunt. 2016. Effect of homofermentative lactic acid bacteria and exogenous hydrolytic enzymes on the ensiling characteristics and rumen degradability of alfalfa, corn silages and cool season mixed grass haylage*. Professional Animal Science 32:598-604*.

19. Moeinoddini, H. R., M. Alikhani, F. Ahmadi, G. R. Ghorbani, and **P. Rezamand***. 2016. Partial replacement of triticale for corn grain in starter diet and its effects on performance of Holstein dairy calves. *Animal 11: 61-67* (doi: 10.1017/S1751731116001233).

18. **Rezamand***, P., B. P. Hatch, K. G. Carnahan, and M. A. McGuire. 2016. Effects of α-linolenic acid-enriched diets on gene expression of key inflammatory mediators in immune and milk cells obtained from Holstein dairy cows. *J. Dairy Res*. *83: 20–27*

17. Hossieni, S. M., G. R. Ghorbani, **P. Rezamand***, and M. Khorvash. 2015. Determining optimum age of Holstein dairy calves when adding chopped alfalfa hay to meal starter diets based on measures of growth and performance. *Animal 10:4, 607-615* (doi:10.1017/S1751731115002499).

16. **Rezamand, P.**, J. Watts, K. M. Yahvah, E. E. Mosley, L. Ma, B. A. Corl, and M. A. McGuire. 2014. Relationship between Stearoyl-CoA Desaturase 1 gene expressions, relative protein abundance, and its fatty acid products in bovine tissues. *J. Dairy Res. 81: 333–339*.

15. Scholte, C. M., **P. Rezamand***, S. L. Shields, and K. C. Ramsey. 2014. Effects of subcutaneous fat stores on serum phospholipids and non-esterified fatty acid lipid fractions in periparturient dairy cows. *J. Agric. Sci & Tech. B.*, *4:352-359*.

14. Pezhveh, N., G. R. Ghorbani, **P. Rezamand***, and M. Khorvash. 2014. Effects of different physical forms of wheat grain in corn-based starter on performance of young Holstein dairy calves. *J Dairy Sci. 97:6382–6390.*

13. Foroudi, F., and **P. Rezamand**. 2014. The effects of dietary Valine on performance, serum antibody titer and bone mineralization in broiler chicks. *Iranian J Applied Anim. Sci*. *4:405-409.*

12. Watts, J. S., **P. Rezamand***, D. L. Sevier, J. K. Kinch, S. M. Clark, and M. A. McGuire. 2013. Short- term effects of dietary *trans* fatty acids on selected inflammatory mediators in early lactating dairy cows. *J Dairy Sci*. *96:6932-6943*.

11. Jarrah, A., G. R. Ghorbani, **P. Rezamand***, and M. Khorvash. 2013. Effects of processing methods of barley grain in starter diets on feed intake and performance of dairy calves. *J. Dairy Sci. 96:7269-7273*.

10. Peterson, S. E., **P. Rezamand*,** J. E. Williams, W. Price, M. Chahine, and M. A. McGuire.2012. Effects of dietary betaine on milk yield and milk composition of mid-lactating dairy cows. *J. Dairy Sci. 95:6557–6562*.

9. **Rezamand*, P**., J. S. Watts, K. M. Hunt, B. J. Bradford, L. Mamedova, and S. D. Morey. 2012. Bovine hepatic and adipose retinol binding protein gene expression and its relationship with tumor necrosis factor-α. *J. Dairy Sci. 95:7097–7104*.

8. Shields, S. L., **P. Rezamand***, D. L. Sevier, K. S. Seo, W. Price, and M. A. McGuire. 2011. Effects of increased milking frequency during early postpartum on selected measures of mammary gland health, milk yield, and milk composition. *J. Dairy Res. 78:301-307*.

7. Schramm, R. D., S. L. Shields, **P. Rezamand***, D. L. Sevier, and M. A. McGuire. 2011. Effects of a feed additive on neutrophil expression of immunomodulatory genes, feed intake and production performance in periparturient dairy cows. *J. Anim. Phys. Anim. Nutr.* doi: 10.1111/j.1439-0396.2011.01190x.

6. **Rezamand, P.,** and M. A. McGuire. 2011. Effects of *trans* fatty acids on markers of inflammation in bovine mammary epithelial cells. *J. Dairy Sci. 94:316-320*.

5. Aitken, S. L., E. L. Karcher, **P. Rezamand**, J. C. Gandy, M. J. VandeHaar, A. V. Capuco, and L. M. Sordillo. 2009. Evaluation of antioxidant and pro-inflammatory gene expression in bovine mammary tissue during the periparturient period. *J Dairy Sci. 92: 589-598*.

4. **Rezamand, P.**, T. A. Hoagland, K. M. Moyes, L. K. Silbart, and S. M. Andrew. 2007. Energy status, lipid-soluble vitamins, and acute phase proteins in periparturient Holstein and Jersey dairy cows with or without sub-clinical mastitis. *J Dairy Sci. 90: 5097-5107*.

3. **Rezamand, P.**, S. M. Andrew, and T. A. Hoagland. 2007. The feeding value of extruded corn grain in a corn-silage based ration for high producing Holstein cows during mid-lactation. *J Dairy Sci. 90: 3475-3481*.

2. Chaubal, S. A., L. B. Ferre, J. A. Molina, D. C. Faber, P. E. Bols, **P. Rezamand**, X. Tian, and X. Yang. 2007. Hormonal treatments for increasing the oocyte and embryo production in an OPUIVF system. *Theriogenology 67:719-728*.

1. Aamalaradjou, M., T. Annamalai, P. Marek, **P. Rezamand**, D. Schreiber Jr., T. A. Hoagland, and K. Venkitanarayanan. 2006. Antibacterial effect of sodium caprylate on Escherichia coli 0157:H7 in cattle drinking water. *J. Food Protection 69:2248-2252*.

Currently Under Review: total of 4

Pace, A., K. M. Mirkin, **P. Rezamand**, and A. L. Skibiel. 2023. Seeing through the smoke- the effects of wildfire-$PM_{2.5}$ exposure on standing and lying behavior in Holstein heifer calves. Submitted (2023) to *JDS Communication*. *Under Review*

Tsai, C. Y., H. C. Hung, T. Weber, A. Ahmadzadeh, M. Chahine, W. J. Price, and **P. Rezamand***. 2023. The relationship between nutrient metabolism and health measures during the periparturient period in Pacific Northwest dairy herds. Submitted (2023) to *J Dairy Sci. Under Review*

Christensen, L. J. Williams, M. M. McGuire, **P. Rezamand**, and D. E. Konetchy. 2023. Use of Systemic Antibiotics and Topical Nasal Treatments to Clear Mycoplasma ovipneumoniae From Lambs. Submitted to PLOS ONE (2023). *Under Review.*

Tverdy, B. J., C. Y. Tsai, H. C. Hung, W. J. Price, and **P. Rezamand***. 2022. Effects of Serum Total Protein on Health Measures, Lipid-Soluble Vitamins, and Average Daily Gain in Holstein Dairy Calf. Submitted (2023-R1) to *American J. Vet Res. Under Review.*

Publications - Peer Reviewed/Evaluated

- Abstracts (conferences): total of 95 **(*† Principal Investigator*): 61**

95. Pace, A., **P. Rezamand**, and A. L. Skibiel. 2023. Effects of wildfire smoke $PM_{2.5}$ exposure on health and performance of dairy heifer calves. In: Proceedings of the 57th Annual Pacific Northwest Animal Nutrition Conference: p. 179.
94. Pereira, L., **P. Rezamand**, B. Agustinho, G. Vigne, D. Volpi, Q. Tavares, N. Mello1, P. Schmidt, and M. Zopollatto. 2022. Effect of inclusion of different essential oils on wet corn gluten feed at ensiling. *J. Dairy Sci. Vol. 105, Suppl. 1): 382 (abstr.).*
93. Elmore, K., D. Konetchy, M. Chahine, A. Laarman, B. Agustinho, **P. Rezamand**†, and G. Chibisa. 2022. Effects of colostrum management and meloxicam administration on hematological parameters in transported pre-weaned calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 375 (abstr.).*
92. Agustinho, B. C., A. E. Mark, A. H. Laarman, D. E. Konetchy, and **P. Rezamand**†. 2022. Effect of pH and lipopolysaccharide concentration in vitro on tight junction regulators and inflammatory markers. *J. Dairy Sci. Vol. 105, Suppl. 1): 305 (abstr.).*
91. Pereira, L., **P. Rezamand**, B. Agustinho, G. Vigne, D. Volpi, Q. Tavares, N. Mello, P. Schmidt, and M. Zopollatto. 2022. A natural compound as an additive to improve fermentation and aerobic stability of whole-plant corn silage. *J. Dairy Sci. Vol. 105, Suppl. 1): 297 (abstr.).*

90. Jimenez, E., J. Spring, Q. Hun, C. Y. Tsai, H. H. Hung, T. Weber, **P. Rezamand**, M. Martinez, and A. A. Barragan. 2022. Associations between clinical metritis and type 1/type 2 immunity in postpartum Holstein dairy cows. *J. Dairy Sci. Vol. 105, Suppl. 1): 288 (abstr.).*
89. Pereira, L., **P. Rezamand**, B. Agustinho, G. Vigne, D. Volpi, Q. Tavares, N. Mello, P. Schmidt, and M. Zopollatto. 2022. Effect of inclusion of different essential oils at ensiling on fermentative profile of wet corn gluten feed. *J. Dairy Sci. Vol. 105, Suppl. 1): 246 (abstr.).*
88. Mazinani, M., B. J. Tverdy, C. Y. Tsai, W. J. Price, and **P. Rezamand**†. 2022. Association of passive transfer of immunity, measured by serum total protein, with health measures and serum metabolites in female Jersey calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 234 (abstr.).*
88. Pace, A., **P. Rezamand**, and A. L. Skibiel. 2022. Effects of wildfire smoke $PM_{2.5}$ on preweaned Holstein dairy cows**.** *J. Dairy Sci. Vol. 105, Suppl. 1): 177 (abstr.).*
87. Skibiel, A. L. A. Anderson, and **P. Rezamand**. 2022. Physiological and production responses of lactating dairy cows to wildfire particulates. *J. Dairy Sci. Vol. 105, Suppl. 1): 113 (abstr.).*
86. Pace, A., **P. Rezamand**, and A. L. Skibiel. 2022. Effects of wildfire smoke $PM_{2.5}$ on pre-weaned Holstein dairy calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 113 (abstr.).*
85. Wolfe, A., **P. Rezamand**, B. C. Agustinho, D. Konetchy, and A. Laarman. 2022. Effects of weaning strategies on health, hematology, and productivity in Holstein dairy calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 178 (abstr.).*
84. Elmore, K., D. Konetchy, M. Chahine, A. Laarman, B. Agustinho1, **P. Rezamand**†, and G. Chibisa. 2022. Effect of colostrum management and meloxicam administration on indicators of stress and inflammation in transported preweaned calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 22 (abstr.).*
83. Agustinho, B. C., A. Wolfe, C. Y. Tsai, L. P. de Moura, D. E. Konetchy, A. H. Laarman, and **P. Rezamand**†. 2022. Effect of weaning age and pace on biosynthesis of oxylipids in Holstein dairy calves. *J. Dairy Sci. Vol. 105, Suppl. 1): 16 (abstr.).*
82. Agustinho, B. C., A. Wolfe, C. Y. Tsai, D. E. Konetchy, A. H. Laarman, AND **P. Rezamand**†. 2022. Effect of weaning pace and age on the health measures and tissue gene expression of inflammatory markers in Holstein dairy calves. In: Proceedings of the 56th Annual Pacific Northwest Animal Nutrition Conference: p. 171.
81. Elmore, K. K., **P. Rezamand**†, D. Konetchy, M. Chahine, B. C. Agustinho, A. H. Laarman, and G. E. Chibisa. 2022. Management Strategies to Reduce Negative Health Outcomes in Transported Pre-weaned Calves. In: Proceedings of the 56th Annual Pacific Northwest Animal Nutrition Conference: p.173.
80. Pereira L. D., **P. Rezamand**, B. C. Agustinho, G. L. D. Vigne, D. Volpi, N. N. de Mello, Q. G. Tavares. P. Schmid, and M. Zopollatto. 2022. The effects of allyl isothiocyanate inclusion as an additive on whole-plant corn silage. In: Proceedings of the 56th Annual Pacific Northwest Animal Nutrition Conference: p.177.
79. **Rezamand**†, P., A. H. Laarman, D. Konetchy, B. C. Agustinho, A. Wolfe, and C. Y. Tsai. 2021. The effects of weaning pace on blood metabolites of Holstein dairy calves. *CRWAD: 510 (abstr.).*
78. Agustinho, B. C., A. Wolfe, C. Y. Tsai, D. E. Konetchy, A. H. Laarman, and **P. Rezamand**†. 2021. Effect of weaning pace and age on the gene expression of inflammatory markers in hepatic, rumen, and intestinal tissues of Holstein dairy calves. *J. Dairy Sci. Vol. 104, Suppl. 1): 60 (abstr.).*

77. Wolfe, A., B. C. Agustinho, C. Y. Tsai, D. E. Konetchy, A. H. Laarman, and **P. Rezamand**†. 2021. Effect of weaning pace and age on the blood cells and haptoglobin concentration of Holstein dairy calves. July 2021. *J. Dairy Sci. Vol. 104, Suppl. 1): 60 (abstr.).*
76. Tsai C. Y., H. H. Hung, T. Weber, Q. Huo, and **P. Rezamand**†. 2021. Relationship between serum metabolites and milk fatty acid with periparturient diseases in Pacific Northwest dairy farms. July 2021. *J. Dairy Sci. Vol. 104, Suppl. 1): 37 (abstr.).*
75. Wolfe, A, **P. Rezamand**, B. Agustinho, D. E. Konetchy, and A. Laarman. 2021. Effects of weaning strategies on intake, growth, and health in Holstein dairy calves. July 2021. *J. Dairy Sci. Vol. 104, Suppl. 1): 11 (abstr.).*
74. Hun, Q. T., C. Y. Tsai, R. Hassan, H. H. Hung, T. Weber, W. J. Price, P. **Rezamand**†. 2020. A rapid test to monitor the immune status changes and disease risk of dairy cows during the periparturient period. December 2020. Conference of Research Workers in Animal Disease. 174. (Abstr.).
73. Tverdy, B. J., C.Y. Tsai1, H. Hung, and **P. Rezamand**†. 2020. Effects of serum protein on health measures, average daily gain, and metabolites in the Holstein dairy calf. December 2020. Conference of Research Workers in Animal Disease. 230. (Abstr.).
72. **Rezamand**†, **P**., A. H. Laarman, and D. Konetchy. 2020. Early life stressors affect health of dairy calves. December 2020. Conference of Research Workers in Animal Disease. 350. (Abstr.).
71. Hong, H. T., H. C. Hung, K. R. Kerner, A. L. Peterson, S. Burkhardt, A. H. Laarman, and **P. Rezamand**†. 2020. Preference, feeding behavior, and *in vitro* fermentation characteristics of pelleted feeds containing different binders in growing Holstein cows. Submitted to the American Dairy Science Association annual meetings, June 2020. *J. Dairy Sci 103 (Suppl. 1):* 172. (Abstr.).
70. Steelreath, M. R., H. C. Hung, R. L. Hiltz, M. N. Degenshein, A. Aguilar, H. Nielsen, A. H. Laarman, and **P. Rezamand**†. 2020. Effect of a commercial active dry yeast (CNCM I-1079) on productive and metabolic measures during the periparturient transition. Submitted to the American Dairy Science Association annual meetings, June 2020. *J. Dairy Sci 103 (Suppl. 1);* 10. (Abstr.).
69. Tsai, C. Y., H. H. Hung, T. Weber, W. J. Price and **P. Rezamand**†. 2020. Relationship between nutrient metabolism during the periparturient period and health measures in a Pacific Northwest dairy herd. Submitted to the American Dairy Science Association annual meetings, June 2020. *J. Dairy Sci 103 (Suppl. 1);* 27. (Abstr.).
68. Tverdy, B. J., C.Y. Tsai1, W. J. Price, and **P. Rezamand**†. 2020. Effects of serum protein concentrations on growth and selected health measures in Holstein dairy calf. Submitted to the American Dairy Science Association annual meetings, June 2020. *J. Dairy Sci 103 (Suppl.);* 102. (Abstr.).
67. Hung H. C., C. Y. Tsai, J. E. Williams, G. E. Chibisa, W. J. Price, M. A. McGuire, M. Chahine, and **P. Rezamand**†. 2020. Effect of betaine supplementation on rumen microbiome of mid-lactating Holstein dairy cows. *J. Dairy Sci 103 (Suppl. 1);* 259. (Abstr.).
66. Anderson, A. A., **P. Rezamand**, A. Ahmadzadeh, and A. L. Skibiel. 2020. Effects of particulate matter on health and production of dairy cattle. *J. Dairy Sci 103 (Suppl. 1);* 283. (Abstr.).
65. Tsai, C. Y., H. C. Hung, T. Weber, **P. Rezamand**†. 2020. Relationship between nutrient metabolism during the periparturient period and health measures in a Pacific Northwest dairy herd. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 153.

64. Day, K. L., H. C. Hung, H. T. Hong, C. Y. Tsai, G. E. Chibisa, A. H. Laarman, and **P. Rezamand**†. 2020. *In Vitro* Fermentation Characteristics, Feeding Behavior, and Preference of Growing Holstein Dairy Heifers to a Modified Lignin Product. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 145.
63. Steelreath, M. R., H. C. Hung, R. L. Hiltz, M. N. Degenshein, A. Aguilar, H. Nielsen, A. H. Laarman, and **P. Rezamand**†**.** 2020. Impact of a commercial direct-fed microbial on cow performance during the periparturient transition. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 152.
62. Hong, H. T., H. C. Hung, K. R. Kerner, A. L. Peterson, S. Burkhardt, A. H. Laarman, and **P. Rezamand**†. 2020. Intake and in Vito Fermentation Characteristics of Pelleted Feeds Containing Different Binders in Growing Primiparous Holstein Cows Diets. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 146.
61. Tverdy, B. J., C.Y. Tsai1, W. J. Price, and **P. Rezamand**†. 2020. Effects of Serum Protein Concentrations on Selected Health Measures within the First 90 Days of Life in Holstein Dairy Calf. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 154.
60. Kelley, T., G. E. Chibisa, **P. Rezamand**, M. Chahine. 2020. *In vitro* rumen fermentation characteristics of high-grade crystalline vs. low-grade liquid betaine products. In: Proceedings of the 55th Annual Pacific Northwest Animal Nutrition Conference: p. 148.
59. Tsai, C. Y., H. H. Hung, W. J. Price, and **P. Rezamand**†. 2019. Relationship between serum lipid-soluble vitamins during the periparturient period and health measures in the Pacific Northwest dairy herds. J. Dairy Sci. 102(E-Suppl. 1):130. (Abstr.).
58. Tverdy, B. J., C. Y. Tsai, W. J. Price, and **P. Rezamand**†. 2019. Effects of serum protein concentrations on selected health measures within the first 90 days of life in Holstein dairy calf. J. Dairy Sci. 102(E-Suppl. 1):288. (Abstr.).
57. Hung, H. C., C. Y. Tsai, M. Chahine, and **P. Rezamand**†. 2019. Effect of betaine supplementation on total serum fatty acids profile in mid-lactating Holstein dairy cows. J. Dairy Sci. 102(E-Suppl. 1):366. (Abstr.).
56. Kelley, T., G. E. Chibisa, **P. Rezamand**, and M. Chahine. 2019. In vitro rumen fermentation characteristics of high-grade crystalline versus low-grade liquid betaine products. J. Dairy Sci. 102(E-Suppl. 1):374. (Abstr.).
55. Hung, H.-C., C.-Y. Tsai, G. Chibisa, M. Chahine, M. McGuire, and **P. Rezamand**†. 2018. Effect of betaine supplementation on total-tract digestibility and production performance in Mid-lactating Holstein dairy cows. J. Dairy Sci. 101(E-Suppl. 2):95. (Abstr.).
54. Hung, H.-C., C.-Y. Tsai, G. Chibisa, M. Chahine, M. McGuire, and **P. Rezamand**†. 2018. Effect of betaine supplementation on rumen fermentation measures in Holstein dairy cows. J. Dairy Sci. 101(E-Suppl. 2):300. (Abstr.).
53. Peravian, P., M. Dehghan Banadaky, H. Mirzai, **P. Rezamand**, and H. Khalilvandi. 2018. *In vitro* assessment of oil releasing extent from calcium salt of fat supplements in different sites of gastrointestinal tract. J. Dairy Sci. 101(E-Suppl. 2):313. (Abstr.).
52. Stevens, A. V., A. H. Laarman, **P. Rezamand**, K. Karges, and G. Chibisa. 2018. Production performance and nitrogen utilization in dairy cows fed low or high crude protein diets containing corn dried distillers' grains with solubles and supplemented with Lactivate or ProLak. J. Dairy Sci. 101(E-Suppl. 2):290. (Abstr.).

51. Tsai, C. Y., F. Rosa, M. Bionaz, and **P. Rezamand**†. 2018. Effects of 2,4-thiazolidinedione on milk fatty acid profile and vitamins in dairy goats with subclinical mastitis. J. Dairy Sci. 101(ESuppl.2):223. (Abstr.).
50. Tsai, C. Y., F. Rosa, M. Bionaz, and **P. Rezamand**†**.** 2018. Effects of 2, 4- thiazolidinedione on milk fatty acid profile and vitamins in dairy goats with subclinical mastitis. In: Proceedings of the 53rd Annual Pacific Northwest Animal Nutrition Conference: p. 7.
49. Hung, H. C., C. Y. Tsai, G. E. Chibisa, M. Chahine, M. A. McGuire and **P. Rezamand**†**.** 2018. In: Proceedings of the 53rd Annual Pacific Northwest Animal Nutrition Conference: p. 8.
48. Tsai, C. Y., F. Rosa, M. Bionaz, and **P. Rezamand**†. 2017. The effect of 2,4- thiazolidinedione on lipid soluble vitamins in lactating goats induced with sub-clinical mastitis. J. Dairy Sci. Vol. 100, (E-Suppl. 1):229.
47. Tsai, C. Y., W. I. Loucks, C. M. Scholte, K. C. Ramsey, M. E. Doumit, and **P. Rezamand**†. 2016. The effect of dietary fats on fatty acid composition, gene expression, and vitamins status in pre-ruminant calves J. Dairy Sci. Vol. 99, (E-Suppl. 1):339.
46. Chen, Y., K. C. Ramsey, C. Y. Tsai, M. A. McGuire, and **P. Rezamand**†. 2016. Interaction among energy status, dietary protein, and vitamin A in periparturient dairy cows: Effects on milk fatty acid profile and gross milk yield efficiency. Dairy Sci. Vol. 99, (E-Suppl. 1):404.
45. Tsai, C. Y., C. M. Scholte, K. C. Ramsey, M. E. Doumit, and **P. Rezamand**†. 2016. The effect of dietary saturated and unsaturated fatty acid fatty acid composition of adipose and liver lipid fractions in pre-ruminant calves. In: Proceedings of the 51st Annual Pacific Northwest Animal Nutrition Conference: p. 2.
44. Chilson, J. M., C. Y. Tsai, K. C. Ramsey, R. Scuderi, and **P. Rezamand**†. 2015. Effect of a combination of lactic acid producing bacteria and fibrolytic enzymes on the ensiling characteristics of cool season grasses: A farm-scale application. J. Dairy Sci. Vol. 98, (E-Suppl. 1): 207.
43. Scholte, C. M., Z. M-Amiri, B. Shafii, and **P. Rezamand**†. 2015. Effects of elevated subcutaneous adipose stores on fractionated peripheral blood mononuclear cells and polymorphonucleocytes fatty acid profile and polymorphonucleocytes gene expression in periparturient dairy cow. J. Dairy Sci. Vol. 98, (E-Suppl. 1): 213.
42. Scuderi, R., C. E. Watt, Z. M. Amiri, C. M. Scholte, C.Y. Tsai, and **P. Rezamand**†. 2014. Effects of elevated lipomobilization on non-esterified fatty acids and the gene expression of inflammatory markers in early lactating dairy cows. In: Proceedings of the 49th Annual Pacific Northwest Animal Nutrition Conference: p. 9.
41. Scholte, C.M., K.C. Ramsey, C. Tsai, Z.M. Amiri, B. Shafii and **P. Rezamand**†. 2014. Effects of elevated subcutaneous fat stores on serum phospholipids fatty acid profile in periparturient dairy cows. In: Proceedings of the 49th Annual Pacific Northwest Animal Nutrition Conference: p. 5.
40. Tsai, C. Y., C. M. Scholte, J. M. Chilson, K. C. Ramsey, M. E. Doumit, and **P. Rezamand**†. 2014. The effect of dietary saturated and unsaturated fatty acid on gene expression and fatty acid composition of serum, adipose and liver lipid fractions in pre-ruminant calves. In: Proceedings of the 49th Annual Pacific Northwest Animal Nutrition Conference: p. 6.
39. Chilson, J. M., M. E. Drewnoski, and **P. Rezamand**†. 2014. Improving ensiling characteristics of lower quality forages using combination homo-fermentative lactic acid-producing bacteria and fibrolytic enzymes. In: Proceedings of the 49th Annual Pacific Northwest Animal Nutrition Conference: p. 8.

38. Watt, C. E., Z.M. Amiri, C. Scholte, C.Y. Tsai, and **P. Rezamand**†**.** 2014. Effects of elevated lipomobilization on polymorphonucleocyte gene expression of inflammatory markers in early lactating dairy cows. In: Proceedings of the 2014 ICUR conference.
37. Chilson, J. M., **P. Rezamand**, and M. E. Drewnoski. 2014. The effects of combination of lactic acid-producing bacteria and hydrolytic enzyme inoculants on ensiling characteristics of alfalfa and corn. J. Dairy Sci. Vol. 97 (E-Suppl. 1):153.
36. Ramsey, K. C., J. D. Blickenstaff, C. Y. Tsai, C. M. Scholte, W. Price, M. A. McGuire, and **P. Rezamand**†. 2014. Interaction among energy status and retinoid status in periparturient dairy cows: Production, milk retinoid, and metabolic response. J. Dairy Sci. Vol. 97 (E-Suppl. 1):170.
35. Scholte, C. M., K. C. Ramsey, C. Y. Tsai, A. Hendrickson, Z. M-Amiri, B. Shafii, and **P. Rezamand**†. 2014. Effects of elevated subcutaneous fat stores on serum non-esterified and milk fatty acid profile and peripheral blood mononuclear cells gene expression of pro-inflammatory markers and production measures in periparturient dairy cows. J. Dairy Sci. Vol. 97 (E-Suppl. 1): 168-169.
34. Tsai, C. Y., K. C. Ramsey, J. Murray, Z. M-Amiri, L. Martin, W. Price, M. A. McGuire and **P. Rezamand**†. 2014. Interaction among energy status, retinol- binding protein and retinoids status in periparturient dairy cows: hepatic and adipose gene expression. J. Dairy Sci. Vol. 97 (E Suppl. 1): 572.
33. Scholte, C. M., K. C. Ramsey, S. L. Shields, and **P. Rezamand**†. 2013. Effect of subcutaneous fat stores on serum phospholipid and non-esterified fatty acid fractions in periparturient dairy cows. In: Proceedings of the 48th Annual Pacific Northwest Animal Nutrition Conference.
32. Ramsey, K.C., J. Blickenstaff, C.Y. Tsai, C. M. Scholte, K. Person, S. Clark, M. A. McGuire, and **P. Rezamand**†. 2013. Effects of feeding Vitamin A, ionophores, and protein on feed intake, milk components, and somatic cell score. In: Proceedings of the 48th Annual Pacific Northwest Animal Nutrition Conference.
31. **Rezamand**†**,** P., and C. M. Scholte. 2013. Effect of subcutaneous fat stores on fatty acid content of serum non-esterified fatty acids fraction in periparturient dairy cows. In: Proceedings of the 6th Annual International Conference on Agriculture, 64.
30. Scholte, C. M., K. C. Ramsey, S. L. Shields, **P. Rezamand**†. 2013. Effect of subcutaneous fat stores on fatty acid content of serum phospholipids fraction in periparturient dairy cows. J. Dairy Sci. Vol. 96 (E-Suppl. 1): 477.
29. Foroudi, F., K. C. Ramsey, and **P. Rezamand**†. 2013. Effects of dietary protein and vitamin A on retinoids and retinol binding protein in periparturient rats. FASEB J. 2013 27:1083.8.
28. **Rezamand**†**, P.**, K. M. Hunt, J. S. Watts, J. D. Blickenstaff, B. J. Bradford, and L. K. Mamedova. 2012. Bovine hepatic retinol binding protein gene expression and its relationship with tumor necrosis factor-α. J. Dairy Sci. Vol. 95 (E. Suppl. 2): 513.
27. Reyes S, M, **P. Rezamand**, J. E. Williams and M. A. McGuire.2012. Effects of lipid emulsions on biomarkers of inflammation in human umbilical vein endothelial cells. FASEB J 26:1033.13.
26. Foroudi, F and **P. Rezamand.** 2012. The effects of dietary valine-lysine ratio in starter period on performance measures and serum antibody titer in broiler chicks. Poultry Sci. 91(Suppl. 1): 109.

25. Watts, J. S., D. L. Sevier, S. M. Clark, M. A. McGuire, and **P. Rezamand**†. 2011. Effect of dietary *trans* fatty acids on milk yield and milk composition of early lactating dairy cows. J. Dairy Sci. Vol. 94, (E-Suppl. 1): 132.
24. Watts, J. S., D. L. Sevier, J. K. Kinch, S. M. Clark, M. A. McGuire, and **P. Rezamand**†. 2011. Effect of dietary *trans* fatty acids on selected inflammatory mediators in early lactating dairy cows. J. Dairy Sci. Vol. 94, (E-Suppl. 1): 238.
23. Peterson, S. E., J. K. Kinch, J. E. Williams, M. A. McGuire, M. Chahine, and **P. Rezamand**†. 2010. Effects of dietary betaine on milk yield and milk composition of mid-lactating dairy cows. In: Proceedings of the 45th Annual Pacific Northwest Animal Nutrition Conference. p. 192.
22. Reyes Paredes, S. M., **P. Rezamand**, J. E. Williams, and M. A. McGuire. 2010. Ruminant and industrial *trans* fatty acids alter expression of inflammatory biomarkers in human mammary epithelial cells. In: Proceedings of the 15th International Conference of the International Society for Research in Human Milk and Lactation. p. 47.
21. **Rezamand**†**, P.**, K. M. Hunt, R. D. Schramm, and M. A. McGuire. 2010. Bovine hepatic and adipose retinol binding protein gene expression. J. Dairy Sci. Vol. 93 (E-Suppl. 1):313.
20. Peterson, S. E., J. K. Kinch, J. E. Williams, M. A. McGuire, M. Chahine, and **P. Rezamand**†. 2010. Effects of dietary betaine on milk yield and milk composition of mid-lactating dairy cows. J. Dairy Sci. Vol. 93 (E-Suppl. 1):720.
19. Rill, C. R., T. Lu, J. E. Williams, B. Hatch, B. Shafii, **P. Rezamand**, J. Chapman, and M. A. McGuire. 2010. Effect of dietary OmniGen-AF on milk somatic cell count and the ability of isolated blood neutrophils to kill pathogens. J. Dairy Sci. Vol. 93 (E-Suppl. 1):724.
18. Schramm, R. D., S. L. Shields, D. L. Sevier, M. A. McGuire, and **P. Rezamand**†. 2010. Effects of a feed additive on neutrophil expression of immunomodulatory genes and production performance in periparturient dairy cows. J. Dairy Sci. Vol. 93 (E-Suppl. 1):588.
17. Shields, S. L., D. Sevier, **P. Rezamand**†, and M. A. McGuire. 2009. Effects of increased milking frequency on milk yield, milk composition, and mammary gland health. In: Proceedings of the 44th Annual Pacific Northwest Animal Nutrition Conference. p.192.
16. **Rezamand, P.**, J. Watts, D. Pfeifer, K. M. Hunt, S. Zaman, and M. A. McGuire. 2009. Stearoyl CoA desaturase gene expression and its fatty acid products in bovine tissues. J. Dairy Sci. Vol. 92 (E-Suppl. 1):78.
15. **Rezamand, P**., B. P. Hatch, K. Parnell, K. M. Hunt, J. E. Williams, W. Price, and M. A. McGuire. 2009. Comparison of in vivo and in vitro mammary cell expression of selected inflammatory genes in response to α-linolenic acid. J. Dairy Sci. Vol. 92 (E-Suppl. 1):199.
14. Shields, S. L., D. L. Sevier, J. E. Williams, S. Zaman, **P. Rezamand**†, and M. A. McGuire. 2009. Effects of increased milking frequency on milk fatty acid composition in early lactation dairy cows. J. Dairy Sci. Vol. 92 (E-Suppl. 1):49.
13. Shields, S. L., D. Sevier, J. Peak, K. S. Seo, **P. Rezamand**†, and M. A. McGuire. 2009. Effects of increased milking frequency on milk yield and selected measures of mammary gland health in lactating cows. J. Dairy Sci. Vol. 92 (E-Suppl. 1):52.
12. Hatch, B.P., K. Boydston, **P. Rezamand**, and M. A. McGuire. 2009. Evaluation of camelina meal as a protein and omega-3 source for lactating dairy cattle. J. Dairy Sci. Vol. 92 (E-Suppl. 1):462.
11. Hunt, K. M., K. G. Carnahan, B. P. Hatch, K. O. Parnell, J. E. Williams, **P. Rezamand**, and M. A. McGuire. 2009. Effects of an alpha-linolenic acid enriched diet on mRNA expression of lipid metabolism genes in bovine milk somatic cells. FASEB J. 2009 23:546.10.

10. **Rezamand, P.**, E. Myers, K. M. Hunt, and M. A. McGuire. 2009. Expression of inflammatory genes are altered by *trans* fatty acids in primary aortic endothelial cells. FASEB J. 2009 23:910.15.
9. **Rezamand, P.**, K. M. Hunt, J. E. Williams, S. L. Shields, and M. A. McGuire. 2009. Effects of *trans* fatty acids on markers of inflammation. FASEB J. 2009 23:910.16.
8. **Rezamand, P.**, K. G. Carnahan, J. E. Williams, B. P. Hatch, K. O. Parnell, and M. A. McGuire. 2009. Effects of alpha-linolenic acid-enriched rations on markers of inflammation in dairy cattle. FASEB J. 23:910.17.
7. Hatch, B. P., **P. Rezamand**, and M.A. McGuire. 2008. Evaluation of camelina meal as a protein source for lactating dairy cattle. In: Proceedings of the 43rd Annual Pacific Northwest Animal Nutrition Conference. p. 102.
6. **Rezamand, P.**, T. A. Hoagland, R. M. Clark, and S. M. Andrew.2008. Relationship between indices of energy status and plasma lipids, lipid-soluble vitamins and hepatic-derived export proteins in periparturient Holstein and Jersey cows. J. Dairy Sci. 91 (Suppl. 1):261.
5. **Rezamand, P.**, S. M. Andrew, K. M. Moyes, and R. M. Clark. 2005. Effects of energy status, breed, and plasma metabolites on new intramammary infections in periparturient Holstein and Jersey dairy cows during the transition period. J. Dairy Sci. 88 (Suppl. 1): 99.
4. **Rezamand, P.**, V. Homayoni, S. A. Mirhadee, M. Shivazad. 2000. Investigation on various levels of high and low-fiber sunflower seed meal and enzymatic treatment in broiler nutrition (Abstr. # P 4.25, In: Proc. 21st World Poultry Congress, Proceedings. Montreal, Canada. Aug. 2000).
3. **Rezamand†, P.** 2000. Investigation on effects of different levels of bakery byproducts in broiler nutrition (Abst. P 18.30, In: Proc. 21st World Poultry Congress, Proceedings. Montreal, Canada. Aug. 2000).
2. **Rezamand†, P.**, and M. Irani. 1997. Effects of feeding Caraway pulp in broiler nutrition (in Persian, Abstr. 42, In: Proc. the 2nd National Animal Nutrition Conference; Tehran, Iran. July 1997).
1. **Rezamand†, P.** 1997. Inclusion of dried citrus pulp in broiler rations (in Persian, Abstr. # 37, In: Proceeding of the 2nd National Animal Nutrition Conference; Tehran, Iran. July 1997).

- Pending/Submitted Abstracts (conferences):

- Proceedings (peer-reviewed): total of 7

7. Skibiel, A. L., A. Anderson, and **P. Rezamand**. 2023. Effects of wildfire smoke exposure in cattle: a review of the current state of knowledge and future directions. In: Proceedings of the 57th Annual Pacific Northwest Animal Nutrition Conference. pp. 38-51.
6. **Rezamand, P**. 2014. Effect of elevated lipid mobilization on gene expression and fatty acid composition of circulating immune cells, milk, and blood lipid fractions of periparturient dairy cows. In: Proceedings of the 49th Annual Pacific Northwest Animal Nutrition Conference. pp. 1-9.
5. **Rezamand, P**., M. A. McGuire, and S. M. Andrew. 2009. Interaction among energy status, retinol-binding protein and intra-mammary infections in periparturient dairy cows. In: Proceedings of the 44th Annual Pacific Northwest Animal Nutrition Conference. pp. 71-83.

4. McGuire, M.A., M. Theuer, and **P. Rezamand**. 2008. Putting the transition period into perspective. In: Proceedings of the 23rd Annual Southwest Nutrition & Management Conference. pp. 157-164.

3. **Rezamand, P.** 2000. Energy in horse nutrition (two consecutive papers published in Persian: Horse Magazine, Vol: 10 and 11).

2. **Rezamand, P.**, and M. Shivazad. 1996. Date and date byproducts in animal nutrition (published in Persian: Poultry & Livestock nutrition, 18:79-85).

1. **Rezamand, P.**, M. Salimi- Vahid, S. A. Mirhadee, and M. Shivazad. 1995. Effects of different levels of chemically, heat-treated and untreated date seeds in broiler nutrition (published in Persian: J. of Agricultural Sci. 2: 129-137).

Presentations and Other Creative Activities:

I developed and maintained three webpages from 2008 to 2019:

http://www.webpages.uidaho.edu/avs306
/ http://www.webpages.uidaho.edu/ruminant_nutrition/default.ht
http://www.webpages.uidaho.edu/avs_special_topics/

Grants and Contracts Awarded:

Funded, total: ~ $3,597,000 ***$*** (major spending authority)

Improve dietary recommendations to reduce Phosphorus excretion in dairy cattle. Dairy West/BUILD Dairy. 2023. (PI: **P. Rezamand$**, coPI: M. Chahine, M. E. De Haro Marti, D. E. Konetchy, A. H. Laarman, A. L. Skibiel, A. Ahmadzadeh, and H. Tejeda., proposed budget $107,000, 2023-2025).

Evaluating benefits of neonatal calf gut-originated probiotics, as direct-fed microbials (DFMs), during the weaning transition to improve calf health and performance. 2023. (PI- D. Konetchy, co-PI; **P. Rezamand$**, B.C. Agustinho, J. Dalton, A. Ahmadzadeh, A Laarman, L. Guan, H. Tejeda, to Western SARE, budget $349,900, 2023-2025)

Partnership: wildfire smoke and the dairy industry: impacts on animal health and the molecular and cellular mechanisms involved. 2023. (PI, A. Skibiel, coPI: **P. Rezamand$,** J. Cruickshank, J. Ranches, D. Konetchy, J. Abbott; To USDA-NIFA, budget $771,596, 2023-2026)

Evaluating benefits of neonatal calf gut-originated probiotics, as direct fed microbials (DFMs) during the weaning transition to improve calf health. (PI- Ah. H. Laarman, co-PI; **P. Rezamand$**, D. Konetchy, J. Dalton, A. Ahmadzadeh, , L. Guan, H. Tejeda, to National Science & Engineering Research Council of Canada (ALLRP), budget $217,000, 2023-2025)

Wildfires and smoke exposure: impacts on livestock health and performance and producers' perceptions and sentiments. 2022. (PI: J. Ranches, Co-PIs: K. Wollstein, J. Cruickshank, A. L. Skibiel, **P. Rezamand$**. To USDA-NIFA-CARE, budget $299,798, 2023-2025).

Programming of dairy calf development from intrauterine exposure to wildfire smoke & strategies for farm response to a smoldering predicament. 2022. (PI: A. Skibiel, coPI: **P. Rezamand$,** D. Konetchy, J. Ranches J. Cruickshank, To USDA-NIFA Rapid Response Grant, budget $300,000, 2022-2023).

Improving Idaho's Long-Distance Educational and Telemedicine Capabilities. 2021. USDA Rural Development (PI: **P. Rezamand**[$], coPI: D. Konetchy, M. Chahine, R. Collier, C. McIntosh, D. Habib, …, budget $467,000)

Managing gut inflammation during weaning in young calves. 2020. Agriculture Funding Consortium (PI: A. H. Laarman, coPI: **P. Rezamand,** D. Konetchy, budget $210,000).

Early Life Stressors Affect Health of Dairy Calves. 2020. USDA-NIFA (PI: **P. Rezamand**[$], coPI: A. H. Laarman, D. Konetchy, budget $199, 980).

Novel Binding Agents in Dairy Cattle Pelleting. 2019. Sustainable Fiber Technologies (PI: **P. Rezamand**[$], coPI: A. H. Laarman, budget $44,955).

Functional importance of microbiota on sensory attributes of whole muscle dry-aged beef. 2019. (PI: P. Bass, coPI: M. Colle**, P. Rezamand**, G. Murdock, J. Williams, M. McGuire: $42,550).

Improving Macro-nutrient metabolism course for long distance education. 2018. ($9,000).

Impact of "Excell" on Rumen Fermentation and Health (Pacer Technologies Inc., 2017. PI: A. H. Laarman, co-PI, J. B. Hall, G. E. Chibisa, **P. Rezamand**: $17,044)

ORED 2017 Equipment Request: Upgrading and expanding calf housing facilities (U Idaho Office of Research and Economic Development, 2017. PI: A. H. Laarman, coPI: G. E. Chibisa, **P. Rezamand**; $ 12,500)

Effect of betaine on total tract digestibility, rumen fermentation and rumen microbiome of dairy cows. 2017. Submitted to Amalgamated Sugar (PI, M. Chahine, co-PI, **P. Rezamand**[$], M. McGuire: $49,579).

Ruminal Escape and Intestinal Digestibility of Ruminally Protected Amino Acid Supplements and High By-pass Protein Feedstuffs Commonly Used in Dairy Cattle Diets. 2017. Submitted to H. J. Bakers (PI: G. E. Chibisa, co-PI, **P. Rezamand,** A. H. Laarman: $64,670).

The effects of combination of lactic acid-producing bacteria and hydrolytic enzyme inoculants on ensiling characteristics of mixed cool season grasses. 2014 (with Lallemand; PI, **P. Rezamand**[$], co-PI, M. Drewnoski: $44,500).

Genomic and physiological assessment to identify changes allowing high-soy use in genetically improved line of rainbow trout: Breaking the 20% soy protein barrier in feeds for marine fish. 2013 (with Soybean Aquaculture Alliance: PI: R. Hardy: co-PI, **P. Rezamand,** $152,954).

Improving beef quality by nutritional modification during gestation. 2012-2013 (with the Idaho Beef Council: PI, M. Doumit-, co-PI, **P. Rezamand;** $35,762).

Improving beef quality by nutritional modification during gestation. 2011 (with the Idaho Beef Council: PI, M. Doumit, co-PI, **P. Rezamand:** $47,846).

Interaction among energy status, retinol-binding protein status and intra-mammary infection in periparturient dairy cows. 2010 (with the Idaho Dairymen's Association and Elanco Animal Health, PI, **P. Rezamand**[$]; co-PI, M. A. McGuire: $198,803).

Do alterations in retinoids and retinol-binding protein status affect inflammatory response? 2009. (with the UI seed grants program: **P. Rezamand**[$] ($12,000).

An HPLC to enhance analytical opportunities in bovine mastitis, USDA-AFRI. 2009. **P. Rezamand**[$] and McGuire- PI: $26,000).

Effects of fatty acids from dairy fat and other foods on markers on inflammation and immune system. 2009. United Dairymen of Idaho (PI, M. A. McGuire, co-PI, **P. Rezamand**[$]: $125,249).

Submitted (pending): 349,900 as PI: $349,900

- The effects of air toxics from wildfire smoke on dairy cattle health and performance in the Pacific Northwest. 2022. (PI: **P. Rezamand,** coPI: J. Ranches J. Cruickshank, A. Skibiel, D. Konetchy, Submitted to Western SARE, proposed budget $349,900)

Unfunded: total of $20,688,540 as PI: $7,191,550

- The effects of air toxics from wildfire smoke on dairy cattle health and performance in the Pacific Northwest. 2022. (PI: **P. Rezamand,** coPI: J. Ranches J. Cruickshank, A. Skibiel, D. Konetchy, Submitted to Western SARE, proposed budget $349,900)
- Managing gut inflammation during weaning in young calves and the use of probiotics. 2022. To USDA-NIFA (PI: **P. Rezamand**, coPI: A. H. Laarman, D. Konetchy, proposed budget $649,900)
- Using bovine-derived direct microbials to improve calf health during weaning transition. 2022. PI: A. H**.** Laarman, coPI: **P. Rezamand**, D. Konetchy. Submitted to 2022-2023 Agriculture Funding Consortium, proposed budget $360,111 CAD or ~$267,254 USD)
- Physiological and molecular mechanisms contributing to respiratory health insults associated with exposure to air pollutants derived from wildland fires" (PI: A. Skibiel**,** Co-PI: **P. Rezamand,** J. Ranches J. Cruickshank, D. Konetchy, Submitted to Dept. of Defense-Initiated Research Award Program. FY22 PRMRP, proposed budget $2,239,150).
- Characterization of mechanisms modulating physiological responses and performance of cattle during wildfire smoke exposure (PI, J. Ranches, coPI: **P. Rezamand,** J. Cruickshank, A. Skibiel, D. Konetchy, Submitted to FFAR, proposed budget $448,677).
- Wheat straw treated with lignocellulolytic enzymes: a new marketable coproduct. 2022. To Idaho Wheat Commission. (PI: **P. Rezamand** co-PI: B. C. Agustinho, D. Konetchy, proposed budget $84,000)
- Using lignocellulolytic enzymes to up-cycle wheat straw and improving rumen degradability and digestibility of Holstein dairy cows To US Holstein Association (PI: **P. Rezamand**, coPI: D. Konetchy, B. C. Agustinho, proposed budget $80,000)
- Wildfire smoke and the dairy industry: discovering impacts on animal performance and health, and the molecular and cellular mechanisms involved. 2021. To USDA-NIFA (PI: A. Skibiel, coPI **P. Rezamand**, D. Konetchy, proposed budget $650,000)
- Weaning strategies; managing gut inflammation during weaning in young calves and the implications throughout life cycle. 2021. To USDA-NIFA (PI: **P. Rezamand**, coPI: A. H. Laarman, D. Konetchy, proposed budget $649,800)
- Wildfire smoke and the dairy industry: discovering impacts on animal performance and health, and the molecular and cellular mechanisms involved. 2021. To Western SARE (PI:.**P. Rezamand,** coPI A Skibiel,, D. E. Konetchy, proposed budget $349,000)
- A Low-Cost Binder Supporting Sustainable Animal Agriculture and Aquaculture. 2020. Submitted to Foundation for Agricultural Research (PI: **P. Rezamand**, coPI: A. H. Laarman, M. Powell, proposed budget $350,000).
- Improving pre-weaning resistance to scours via MOS supplementation. 2019. Submitted to Alberta Agriculture and Forestry (PI: A. H. Laarman, coPI: **P. Rezamand,** D. Konetchy, proposed budget $120,000).

- Improve dietary recommendations to reduce Phosphorus excretion in dairy cattle.2019/2020. Submitted to Western SARE (PI: **P. Rezamand**, coPI: A. H. Laarman, M. Chahine, M. E. De Haro Marti, proposed budget $350,000).
- Improving pre-weaning resistance to scours via MOS supplementation. 2019. Submitted to Land O' Lake Animal Nutrition group (PI: **P. Rezamand,** coPI: A. H. Laarman, D. Kontechy proposed budget $110,000). *An agreement was reached between the research team and the funding group but once at the contract level, the parties failed to reach an agreement*.
- Identifying SARA-susceptible cows using milk protein biomarkers. 2019. Submitted to USDA-NIFA (PI: S. Greenwood, coPI: **P. Rezamand**, A. H. Laarman, proposed budget $199,500).
- Dairy Science Experiential Learning: Cultivating a Progressive, Interdisciplinary Hands-on Dairy Education Program for Sustainable Production in the Western US. 2019. Submitted to Keck Foundation. PI: **P. Rezamand**, coPI: A. Ahmadzadeh, K. Wolf, Z. Kayler; proposed budget $320,000).
- Evaluation of the beef bottom round flat as a viable and profitable alternative to beef brisket flat for use in smoked meat preparation. Submitted to Idaho Beef Council. 2019 (PI: Bass; coPI: M. Colle, G. Murdoch, **P. Rezamand**, J. Nasados, and M. McGuire, proposed budget $17,500).
- Influence of dry heat cooking method and degree of doneness on beef strip loin amino acid content, fatty acid profile, fat-soluble vitamin content and nutrient composition. 2019. Submitted to Idaho Beef Council (PI: P. Bass, P., coPI: M. Colle, G. Murdoch, **P. Rezamand**, J. Nasados, M. McGuire, proposed budget $48,985).
- Functional importance of microbiota on sensory attributes of whole-muscle dry-aged beef. (Submitted to NCBA. 2019. PI: P. Bass- coPI; M. Colle, G. Murdoch, **P. Rezamand**, J. Nasados, and M. McGuire, proposed budget $42,500).
- Effect of timing of beef-containing complementary foods on nutritional status, enteric microbiome, and behavior of infants: a randomized controlled trial. 2019. Submitted to Gerber Foundation (PI: M. Colle, coPI: M. McGuire, **P. Rezamand**, J. Williams, L. Tsao, proposed budget $349,000).
- Creating a new industry for dairies in the arid American West to replace commercial fertilizer, enhance productivity of crops and cows, and create new job opportunities; nutrient management, productivity, and labor availability. 2018 (McGuire-PI, Chahine, Strickland, Strawn, Brooks, Shewmaker, **Rezamand**, He, Chen, Lee, and Johnson-Maynard Co-PIs; total proposed budget $9,998,479; **Rezamand's** proposed budget; $873,832).
- Early life stressors affect health of dairy cows. 2018. Submitted to USDA-NIFA (**Rezamand-PI**; G. E. Chibisa and A. H. Laarman co-PI, proposed budget $199,854).
- Influence of dry heat cooking method and degree of doneness on beef strip loin amino acid content, fatty acid profile, fat-soluble vitamin content, and nutrient composition, 2018, National cattlemen's Beef Association, P. Bass and M.J. Colle (PIs) G. Murdoch and **P. Rezamand** (Co-PIs); proposed budget $59,100)
- The nutritive value of lentil as an alternative protein source for ruminants. 2017. USA Dry Peas & Lentils Council (**Rezamand-PI**; Chibisa co-PI: proposed budget $34,000).
- Effect of Elevated Lipomobilization on Innate Immunity of the Mammary Glands and Metabolism in Periparturient Dairy Cows. 2016. Submitted to USDA-NIFA (**Rezamand PI**; K.M. Moyes, co- PI: $ 476,054).

- Effect of feeding Camelina meal to beef cattle to enhance texture and flavor of meat (to NBCA. 2017, **Rezamand-PI,** Chibisa and Doumit co-PI, proposed budget $ 49,900.)
- The nutritive value of lentil as an alternative protein source for ruminants (to USA Dry Pea & Lentil Council, 2016, **Rezamand-PI,** Chibisa co-PI, proposed budget $ 34,050)
- Effect of feeding Camelina meal to beef cattle to enhance texture and flavor of meat (to NBCA 2015, **Rezamand-PI,** Chibisa and Doumit co-PI, proposed budget $ 49,962.5)
- Effect of energy status, dietary nutrients, retinoid metabolism, and retinol binding protein status on intra-mammary infection in dairy cows (to USDA/NIFA 2015; **Rezamand-PI,** proposed budget $499,789).
- Effect of feeding Zeolite on odor control and gas emissions of dairy manure (to I FEEDER 2015; **Rezamand-PI**, proposed budget $67,504).
- Effect of energy status, dietary nutrients, retinoid metabolism, and retinol binding protein status on intra-mammary infection in dairy cows (to USDA/NIFA 2014; **Rezamand-PI,** proposed budget $493,071).
- Evaluating a needle-implantable biosensor to decipher metabolic trends during an induced subclinical ketosis (to USDA/NIFA-SBIR 2013; **Rezamand-PI,** proposed budget $33,593).
- Producing oligosaccharides from biomass to buy down the cost of producing biofuels (to DOESBIR 2013; **Rezamand-coPI,** proposed budget $99,839.41).
- Retinoid metabolism and retinol binding protein status affect mammary gland health during the periparturient period. 2013 (to USDA/NIFA; **Rezamand-PI,** proposed budget $363,560).
- Effect of elevated lipid mobilization on fatty acid composition of blood and immune cells in dairy cows. 2013 (to Elanco Animal Health; **Rezamand-PI**, proposed budget $37,000).
- Linking intra-ruminal dysbiosis, energy status, meta-inflammation and tissue homeostasis to transition cow health. 2013 (collaboration with Univ. Delaware and USDA-ARS to USDA/AFRI; **Rezamand-coPI**, proposed budget $139,661 for UI portion).
- Effect of elevated lipid mobilization on fatty acid composition of blood and immune cells in dairy cows. 2012 (to Western SARE Competitive Grants: **Rezamand-PI**, proposed budget ~ $25,000).
- Effects of elevated lipid-mobilization during the transition period on fatty acids composition of immune cells of high producing dairy cows. 2012 (Elanco: **Rezamand–PI,** proposed budget $37,000).
- Effect of milk, as compared with other animal and plant protein sources, on serum IGF-I levels and occurrence of cancer in rats. 2010 (the United Dairymen of Idaho: **Rezamand–PI,** proposed budget $83,450).
- Synergistic effect of dietary butyrate and sphingomyelin on occurrence of colorectal cancer. 2010 (the United Dairymen of Idaho: **Rezamand–PI,** proposed budget $90,000).
- Retinoid metabolism, milk quality, and macular degeneration. 2009 (PI: E. Washington- with the NIH, collaboration with the Columbia University (University of Idaho portion; **Rezamand co-PI;** McGuire-coPIs, proposed budget $67,000).
- Inflammatory role of *trans* fatty acids in breast cancer. 2009 (with the American cancer society institutional grants program: **Rezamand-PI,** proposed budget $30,000).
- Immuno-modulator feed additive OmniGen on innate defenses of bovine mammary gland.2010 (with the Idaho Dairymen Association: **Rezamand-PI,** proposed budget $27,500).
- Relationships between dietary phosphorus and mammary glands immunity in high producing dairy cows. 2010 (with the Idaho Dairymen Association: **Rezamand-PI,** proposed budget $63,800).

- Stearoyl CoA desaturase regulation of fatty acid composition of milk and meat. 2009 (to the United Dairymen of Idaho: **Rezamand- coPI**; McGuire-PI, proposed budget $100,854).
- Inflammatory role of *trans* fatty acids in breast cancer. 2010 (to the American Cancer Society–WSU institutional grants program: **Rezamand–PI,** proposed budget $30,000).
- Effects of fatty acids from dairy fat and other foods on markers of systemic inflammation and their signaling pathways. 2009 (to the National Dairy Council Nutrition Research: **Rezamand–coPI**; McGuire-PI, proposed budget $99,880).
- Effect of ω-3-enriched rations as compared with *trans* fatty acid- enriched rations on selected measures of milk quality. 2009 (to the United Dairymen of Idaho: **Rezamand-PI**: proposed budget $81,001).
- Increased milking frequency on mammary gland health. 2009 (with the Idaho Dairymen Association: **Rezamand-PI** proposed budget $42,010).
- Stearoyl CoA desaturase in milk fatty acids synthesis. 2008 (to the United Dairymen of Idaho: **Rezamand-coPI**; McGuire-PI, proposed budget $61,000).
- Effect of feeding zeolite on odor control and gas emissions from dairy manure. 2010 (with the Idaho Dairymen Association: **Rezamand**, Chahine, and Norell-PI, proposed budget $72,000).
- Immuno-modulator feed additive OmniGen-AF on innate defenses of bovine mammary gland. 2009 (with the Idaho Dairymen Association: **Rezamand-PI,** proposed budget $43,720).

Gifts (cash $82,000):

- Modified Lignin product in animal nutrition. 2019-2020 (research gift: $31,000 from Colombia Pulp: **Rezamand-PI**).
- Direct Microbial Fed; Lallemnad 2019-2020 research gift ($32,000; **Rezamand-PI**).)
- Effects of *trans* fats on bovine mammary gland health during the periparturient period. 2013 (research gift: $5,000 from Virtus Nutrition: **Rezamand-PI**).
- Effects of *trans* fats on bovine mammary gland health during the periparturient period. 2011 (research gift: $10,000 from Virtus Nutrition: **Rezamand-PI**).
- Preliminary study of the feed additive "OmniGen-AF" on innate immunity of transition cows. 2009 (research gift: $4,000 from Prince Agri: **Rezamand-PI**).

Honors and Awards:

- R. C. Heimsch Research Excellence Award, CALS, University of Idaho (Spring 2023).
- Nominated for the R. C. Heimsch Research Excellence Award, CALS, University of Idaho (April 2022).
- Graduate student Kylee Elmore, 2nd place graduate poster competition (MS), American Dairy Science Association meetings, Kansas City MO, June 2022.
- Nominated for the ADSA Applied Dairy Nutrition Award (June 2021).
- Graduate student Chia-Yu Tsai, 1st place; 2020 Pacific Northwest Animal Nutrition Conference, poster competition, Boise ID, January 2020.
- Graduate student Benjamin Tverdy, 2nd place; 2020 Pacific Northwest Animal Nutrition Conference, poster competition, Boise ID, January 2020.
- Graduate student Chia-Yu Tsai, 1st place; College of Agricultural and Life Sciences Graduate Student Excellence Award, 2017-2018, University of Idaho, Moscow ID, April 2018.
- Graduate student Chia-Yu- Tsai, 2nd place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Boise Idaho, January 2016.

- Graduate student Cynthia M. Scholte, 2nd place; MS Graduate Student Oral Competition, 2015, American Dairy Science Association/American Society of Animal Science joint annual meetings, Orlando, FL, July 2015.
- Graduate student Chia-Yu- Tsai, 2nd place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Vancouver, BC, Canada, October 2014.
- Graduate student Cynthia M. Scholte, 2nd place, Graduate Student Excellence Award, 2013-2014, University of Idaho, Moscow ID, March 2014.
- Graduate student Cynthia M. Scholte, 2nd place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Coeur d'Alene, ID, October 2013.
- Graduate student Jason S. Watts, 1st place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Portland OR, October 2011.
- Graduate student Jason S. Watts, 2nd place MS Graduate Student Oral Competition 2011, American Dairy Science Association/American Society of Animal Science joint annual meetings, New Orleans LA, July 2011.
- Graduate student Sarah E. Peterson, 1st place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Vancouver, BC, Canada, October 2010.
- Graduate student Shannon L. Shields, 1st place Graduate Poster Competition, Pacific Northwest Animal Nutrition Conference, Boise ID, October 2009.
- University of Connecticut, Animal Science Graduate Student Award, 2005-2006.
- Ph.D. Dissertation fellowship, Whetten Graduate Center, University of Connecticut, 2005.
- Developing Countries "Young Scientists Award", World Poultry Congress, Montreal, Canada, July 2000.

SERVICE

Major Committee Assignments:

- ADSA-Overall Program Committee Chair (2024 ADSA), Proposals/Symposia Review Panel, onsite planning (West Palm Beach, FL).
- ADSA-Overall Program Committee Vice Chair (2023 ADSA), Proposals/Symposia Review Panel, onsite planning (Ottawa, Canada).
- USDA-NIFA, Grant Proposals Review Panel (E-conference, Kansas City, MO, April 2020).
- University of Idaho Sabbatical Leave Committee (Sept. 2020-present; current chair)
- USDA-REEU Grant Proposals, UI Internal Review Panel (Moscow ID, Jan 2020).
- University of Idaho Animal Care & Use Committee (alternate; Jan 2020-presetnt).
- USDA-NIFA, Grant Proposals Panel review (Washington DC., July 2019).
- AVS Director of Graduate Studies (Jan. 2015- Sept. 2020).
- University of Idaho Commencement committee (Fall 2015-Fall 2018).
- AVS Graduate Studies Committee (2011-2014; 2020-present in the new AVFS Dept.).
- UI College of Agricultural & Life Sciences Dairy Committee (Fall 2008-Spring 2015).
- USDA-AFRI Pacific Northwest Cool Season Legumes proposal review panel (2009, 2010).
- American Dairy Science Association "Production Division": reviewing, planning and chairing scientific session (Animal Health Committee; 2009).
- Chaired a symposium entitled "Lipid Metabolism and Inflammation Interactions" at the ADSA/ASAS joint annual meetings, New Orleans, July 2011.
- Multistate Hatch project NE1048: past chair (2014-2015)
- Multistate Hatch project NE1048: chair (2013-2014)
- Multistate Hatch project NE1028: Vice-chair (2012-2013)
- Multistate Hatch project NE1028: Secretary (2011-2012)

- Pacific Northwest Animal Nutrition Conference, Chair (Coeur d'Alene ID, 2013), committee member (2010-present)
- Third year, Tenure & Promotion Committees: UI (nine applicants, 2013, 2017, 2018, 2020, 2021, 2023); UNH & UI (seven applicants, 2014, 2015, 2023)
- Hiring Committee: AVFS faculty (three, 2016, 2021), AVFS technical staff chair (one, 2020; two, 2022), FCS nutrition faculty (one, 2019), AVS interim Dept. head (one, 2015), AVS faculty, chair (one, 2016 and 2017), PREEC superintendent and staff (one, 2015, one 2022, one 2023)
- Faculty mentoring Committee: Dr. Anne H. Laarman (2016-2019); Dr. Gwinyai E. Chibisa (2016-2019); Dr. Ann Roe (2019), Dr. Konetchy (2018-2023), Dr. Skibiel (2018-present), Dr. Chen (Aug 2022-Aug 2023), Dr. Isabelle Tiexiera (2022-present)

Professional and Scholarly Organizations

- American Dairy Science Association: Overall Program Committee, Chair (2023-2024)
- American Dairy Science Association: Overall Program Committee, Vice Chair (2022-2023)
- American Dairy Science Association: Production Division Council- Chair (2022-2023)
- American Dairy Science Association: Production Division Council- Vice-Chair (2021-2022)
- American Dairy Science Association: Production Division Council- Secretary (2020-2021)
- Pacific Northwest Animal Nutrition Conference: Organizing & Planning Committee, Lead (2013-present)
- ARPAS-Director/Liaison, Pacific Northwest Chapter (December 2019-present)
- ARPAS-Treasurer/Secretary, Pacific Northwest Chapter (Jan 2018-March 2020)
- Editorial board, Journal of Dairy Science (2011- 2017).
- American Dairy Science Association: member (since ~ 2001').
- American Society for Nutrition: member (since ~2008).
- ARPAS, Pacific Northwest chapter: 2018-present
- *Ad hoc* reviewer for Journal of Dairy Science; Journal of Dairy Research; Journal of Livestock; Animal; Journal of Animal Science; Animals; Journal of Nutrients; Journal of Animal Feed Science & Technology.

Outreach/Extension Service:

- Officially very little at UI; however, always address inquiries made via phone calls and emails related to animal nutrition and health (dairy, beef, sheep, poultry, and horses).
- Collaborate with Extension dairy specialists Dr. Chahine, Dr. Norrel, and Dr. Dalton
- Administrative assistant for the Annual New England Dairy conferences (Vernon, CT:
- 2002-2005).
- Conducted educational programs in dairy nutrition for the Annual Blue Slope Agriculture Fair (Lebanon, CT: 2003-2005).
- Led tours for Farmer Group Study Exchange Team (Chile), March 2005; and UNESCO affiliates (Human Rights Group), July 2005.
- Administrative assistant for the Annual Eastern Connecticut Dairy Meeting (Aug 2005), presenting current dairy research at the University of Connecticut.
- Conducted educational program in dairy nutrition for the Connecticut 4-H dairy clinic (Storrs, CT; 2002 and 2003).

Podcast interviews:

- "Trailblazing research studies wildfires and livestock." Topcon Talks Agriculture podcast. S07E02, April 13, 2023. www.topconpositioning.com/na/podcasts-ag [2]

- "Roundtable: wildfire air pollution and its risks for cows." The Dairy Podcast Show. Episode 28, March 21, 2023. https://www.dairypodcastshow.com/blog/28 [1]

Radio interviews:

- "University of Idaho researchers are studying wildfire effects in dairy cattle", Glenn Vaagen, Pacific Northwest Ag Network, August 9, 2022 [1]
- "We've known how smoke affects humans, but we're only now starting to learn how it affects our cattle." Radio interview with Oregon Public Broadcasting 'Think Out Loud' Program, Rolando Hernandez, September 28, 2021 [2]

Popular Press interviews and research features:

- "Western wildfires cost cows and calves dearly", Corey Geiger, Hoard's Dairyman, February 27, 2023. [2]
- "Effects of wildfire smoke on cattle: what research is out there?", Julia Herman, Beef Quality Assurance, National Cattlemen's Beef Association publication, October 2022. [1]
- "Wildfire smoke threatens cows, too." Katelyn Allen, Hoard's Dairyman, August 4, 2022. [3]
- "Idaho study says cows exposed to wildfire smoke produce less milk." John O'Connell, Idaho State Journal, July 29, 2022. [1]
- "Wildfire smoke takes toll on milk production." Carol Ryan Dumas, Capital Press, July 28, 2022. [2]
- "Production – lost in the haze." Julia McCarthy, Ag Proud, July 2022. [3]
- "Cows can't evacuate: how are livestock affected by wildfires?" Elizabeth Maslyn, Ag Daily, March 23, 2022. [3]
- "Fires and the food chain: wildfires could affect Idaho's food industry more than we thought." Anteia McCollum, Project Fare, October 12, 2021. [1]
- "Wildfire smoke has an impact on milk production in cows, researchers find." Heather Brinkmann, FOX Weather, September 27, 2021. [2]
- "Wildfires are bad for your butter, study shows". Jelisa Castrodale. Food & Wine Magazine, August 23, 2021.
- "What is this doing to their lungs?" Kylie Mohr and High Country News, The Atlantic, August 21, 2021. [1]
- "How do wildfires impact our animals?" Darleen Sichley, Hoard's Dairyman, August 17, 2021. [3]
- "For dairy cows, where there's smoke, there's less milk." Kylie Mohr, High Country News, August 16 [1]

[1] interviewed; [2] team-member interviewed; [3] work mentioned

Community Service:

- Head Coach, Moscow High School Soccer program-boys (May 2019-present).
- Advisor, AVS Graduate Students Association (Jan 2019-present).
- Advisor, UI Men's Soccer Club (October 2016-October 2018).
- Advisor, UI Iranian Students Club (October 2011-present).
- President, Moscow United Soccer Club (February 2013-September 2015).
- Vice President, Moscow United Soccer Club (October 2015- January 2017).
- Board of Directors, Moscow United Soccer Club (July 2012-July 2018).
- Licensed Coach, youth soccer.

PROFESSIONAL DEVELOPMENT:

Scholarship:

- Conference on Research Workers in Animal Disease, December 2022 (E-conference)
- Conference on Research Workers in Animal Disease, December 2021 (E-conference)
- Conference on Research Workers in Animal Disease, December 2020 (E-conference)
- Sabbatical leave, Fall 2017 (Institute of Animal Science, University of Bonn, Germany).
- Mastitis Research Workers Conference/Multistate Hatch. 2021 (E-conference)
- Mastitis Research Workers Conference/Multistate Hatch. 2020 (E-conference)
- Mastitis Research Workers Conference/Multistate Hatch. 2016 (Chicago, IL)
- Grant writing workshop, Washington State University, October 2015
- Mastitis Research Workers Conference/Multistate Hatch. 2015 (Memphis, TN).
- The 6th International Annual Int. Symposium on Agriculture, 2013 (Athens, Greece).
- Mastitis Research Workers Conference/Multistate Hatch. 2012 (Chicago, IL).
- Mastitis Research Workers Conference/Multistate Hatch. 2011 (Chicago, IL).
- Mastitis Research Workers Conference/Multistate Hatch. 2010 (Athens, GA).
- Elanco Science Symposium, 2012 (Chicago, IL).
- Elanco Science Symposium, (2010, 2012; Indianapolis, IN).
- SAS workshop, ADSA/ASAS joint annual meetings, 2008 (Denver, CO).
- American Dairy Science Association joint annual meetings (Summer every year since 2003).
- Pacific Northwest Animal Nutrition Conference (every year since 2009).
- Experimental Biology (April 2009, April 2013, April 2015).

Teaching:

- Teaching: UI-Center for Excellence in Teaching & Learning (CETL) trainings/ multiple group- and one-on-one sessions, Spring/Fall 2019, 2020, 2021, 2022, 2023
- Teaching & Advising workshop, College of Agriculture & Life Sciences, 2020 (Moscow Idaho).
- Teaching workshop, American Dairy Science Association, 2018 (Knoxville, TN, June 2018).