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EDUCATION

- August, 2012-December, 2015 Ph.D in Animal Science/ Iowa State University
Dissertation title: “Effects of heat stress or ketosis on metabolism and inflammatory biomarkers in ruminants and monogastrics”
Advisor: Dr. Lance Baumgard.
- January, 2009-May, 2012 M.Sc. in Animal Production/ The University of Jordan.
Thesis title: “Effect of pre-heat exposure of broiler chickens on alleviating heat stress during heat waves in Jordan”
Advisor: Dr. Abdur-Rahman Al-Fataftah
- August, 2004-May, 2008 B.Sc. in Animal Production/ The University of Jordan (ranked the 1st)

EXPERIENCE

- April, 2016-Present Assistant professor at the Department of Animal Production/Faculty of Agriculture/The University of Jordan/Amman-Jordan
- December, 2015-March, 2016 Lecturer at the Department of Animal Production/Faculty of Agriculture/The University of Jordan/Amman-Jordan
- August, 2012-December, 2015 Graduate Research Assistant at the Department of Animal Science/Iowa State University/Ames, IA
- October, 2008-August, 2012 Graduate Research Assistant at the Department of Animal Production/Faculty of Agriculture/ The University of Jordan/Amman-Jordan

RESEARCH INTERESTS

- Heat stress effects on farm animals (production, reproduction, inflammation, histology)
- Management strategies to ameliorate negative consequences of heat stress

TAUGHT COURSES

Term	Year	Course no.	Course title
Fall	2016/2017	632459	Environmental Physiology of Farm Animals
Fall	2016/2017	602256	Animal Physiology
Spring	2015/2016	632459	Environmental Physiology of Farm Animals
Spring	2015/2016	632488	Animal Production in Hot Regions

REFEREED JOURNAL ARTICLES

M. Abuajamieh, E. J. Laughlin, A. Kaiser, S. M. Lei, S. K. Stoakes, E. J. Mayorga, J. T. Seibert, E. A. Horst, M. V. Sanz-Fernandez, J. W. Ross, J. T. Selsby, R. P. Rhoads, and L. H. Baumgard. The effect of recovery time from heat stress on circulating bioenergetics variables and biomarkers of leaky gut. (In preparation)

M. Abuajamieh, S. K. Stoakes, J. S. Johnson, E. J. Mayorga, E. A. Nolan, M. A. Al-Qaisi, J. M. DeFrain, P. J. Gorden, and L. H. Baumgard. The effects of zinc amino acid complex on biomarkers of gut integrity and metabolism in heat-stressed ruminants. (In preparation)

M. Abuajamieh, S. K. Stoakes, M. V. Sanz-Fernandez, A. Nayeri, N. C. Upah, E. A. Nolan, S. M. Lei, J. M. DeFrain, H. B. Green, K. M. Schoenberg, W. E. Trout, and L. H. Baumgard. Inflammatory biomarkers are associated with ketosis in periparturient Holstein cows. *J. Res. Vet. Sci.* (Submitted)

Abdelqader, A., A. Al-Fataftah, and **M. Abuajamieh**. Butyric acid alleviates villi injury and enhances intestinal recovery of heat-stressed chickens. (submitted)

Kvidera, S. K., E. A. Horst, **M. Abuajamieh**, E. J. Mayorga, M. V. Sanz-Fernandez, and L. H. Baumgard. Technical note: A procedure to estimate glucose requirements of an activated immune system in steers. *J. Anim. Sci.* (accepted)

Johnson, J. S., **M. Abuajamieh**, M. V. Sanz-Fernandez, J. T. Seibert, S. K. Stoakes, A. F. Keating, J. W. Ross, J. T. Selsby, R. P. Rhoads, and L. H. Baumgard. 2015. The impact of in utero heat stress and nutrient restriction on progeny body composition. *J. Therm. Biol.* 53:143-150.

Sanz-Fernandez, M. V., J. S. Johnson, **M. Abuajamieh**, S. K. Stoakes, J. T. Seibert, E. A. Horst, R. P. Rhoads, and L. H. Baumgard. 2015. Effects of heat stress on insulin sensitivity. *Physiol. Rep.* 3(8): e12478.

Sanz-Fernandez, M.V., J. S. Johnson, **M. Abuajamieh**, S. K. Stoakes, J. T. Seibert, L. Cox, S. Kahl, T. H. Elsasser, J. W. Ross, S. C. Isom, R. P. Rhoads, and L. H. Baumgard. 2015. Effects of heat stress on carbohydrate and lipid metabolism in growing pigs, *Physiological Reports.* 3(2): e12315.

BOOK CHAPTERS

Johnson, J.S., **M. Abuajamieh**, M.V. Sanz-Fernandez, J.T. Seibert, S.K. Stoakes, J. Nteeba, A.F. Keating, J.W. Ross, R.P. Rhoads and L.H. Baumgard. 2015. Thermal stress alters post-absorptive metabolism during pre- and postnatal development. Chapter 5. In *Climate Change Impact on Livestock: Adaptation and Mitigation* (Eds. S. Veerasamy, J. Gaughan, L. Baumgard and C. Prasad). Springer Verlag Berlin Heidelberg.

CONFERENCE PROCEEDINGS

Kvidera, S.K., **M. Abuajamieh**, E.A. Horst, M. Al-Qaisi, M.J. Dickson, R.P. Rhoads, A.F. Keating and L.H. Baumgard. 2016. Leaky gut's contribution to heat stress and poor transition into lactation. *Proc. California Anim. Nutr. Conf.* pp. 106-128.

Kvidera, S.K., **M. Abuajamieh**, E.A. Horst, R.P. Rhoads and L.H. Baumgard. 2016. Gut integrity: Implications for health and performance. *Animal Feed Manufacturers Association.* Sun City, South Africa. *Matrix* 25:2 45-47.

Abuajamieh, M., S.K. Kvidera, E.A. Horst, M. Al-Qaisi, M.J. Dickson, R.P. Rhoads, A.F. Keating and L.H. Baumgard. 2016. Leaky gut's contribution to heat stress and maladaptation to lactation. 31st Annual Southwest Nutrition Conference. Tempe AZ Pp. 69-80.

Sanz-Fernandez, M.V., S.K. Stoakes, J.S. Johnson, **M. Abuajamieh**, J.T. Seibert, S.C. Pearce, N.K. Gabler, R.P. Rhoads, and L.H. Baumgard. 2015. Heat stress: What's the gut go to do with it. 2015 Herd Health and Nutrition Conferences. Pp. 41-58. Liverpool NY

Baumgard, L.H., **M. Abuajamieh**, S.K. Stoakes, E. Nolan and R.P. Rhoads. 2014. Production and metabolic consequences of heat stress: Potential nutritional strategies. *Proceedings of the 37th annual Association of Argentina Production Animals (AAPA).* Pg. 12-24.

Stoakes, S.K., **M. Abuajamieh**, M.V. Sanz-Fernandez, J.S. Johnson, J.T. Seibert, R.P. Rhoads, and L.H. Baumgard. 2014. Novel and traditional feed additives and their role in supporting systemic health during stress. In the *Proceedings of the 35th annual Western Nutrition Conference.* Edmonton Canada. Pp. 33-49.

Stoakes, S.K., **M. Abuajamieh**, M.V. Sanz-Fernandez, J.T. Seibert, E. Nolan, R.P. Rhoads, and L.H. Baumgard. 2014. Evaluating compounds with influence in the gut. In 75th annual Minnesota Nutrition Conference. Pp. 33-48.

Baumgard, L.H., **M. Abuajamieh**, S.K. Stoakes, M.V. Sanz-Fernandez, J.S. Johnson and R.P. Rhoads. 2014. Feeding and managing cows to minimize heat stress. Tri-State Dairy Nutrition Conference. Pp. 61-74.

Sanz-Fernandez, M.V., S.K. Stoakes, J.S. Johnson, **M. Abuajamieh**, J.T. Seibert, S.C. Pearce, N.K. Gabler, R.P. Rhoads and L.H. Baumgard. 2014. Heat Stress; What's the Gut Got To Do With It? 29th Annual Southwest Nutrition Conference. Tempe AZ Pp. 42-57.

Sanz-Fernandez, M.V., S.K. Stoakes, J.S. Johnson, **M. Abuajamieh**, J.T. Seibert, S.C. Pearce, N.K. Gabler, R.P. Rhoads and L.H. Baumgard. 2013. Effects of Heat Stress on Production and Metabolism in Swine. 29th Annual North Carolina Swine Nutrition Conference. Pp. 2-16.

Johnson, J.S., **M. Abuajamieh**, M.V. Sanz-Fernandez, J.T. Seibert, S.K. Stoakes, J.W. Ross, J.T. Selsby, N.K. Gabler, H. Xin, M.C. Lucy, T.J. Safranski, R.P. Rhoads, and L.H. Baumgard. 2013. Heat stress alters energy metabolism during pre- and postnatal development. XXIII International Reunion on Production of Meat and Milk in Hot Climates. Mexicali, Mexico. Pp. 38-50.

Stoakes, S.K., M.V. Sanz-Fernandez, J.S. Johnson, **M. Abuajamieh**, J.T. Seibert, S.C. Pearce, N.K. Gabler, R.P. Rhoads and L.H. Baumgard. 2013. Environmental heat stress and gut integrity. Proceedings. In 74th annual Minnesota Nutrition Conference. Pp. 117-133.

Abuajamieh, M., S.K. Stoakes, D.S. Kohls, B.J. Groen, D.A. Lahr, C.R. Kuehn and L.H. Baumgard. 2013. Heat Stress: Practical Lessons Learned in 2011. Proc. Four-State Dairy Nutrition and Management Conference. June 12-13, 2013. Pp. 64-75.

Baumgard, L.H., **M. Abuajamieh**, S.K. Stoakes, M.V. Sanz-Fernandez, J.S. Johnson, D.B. Snider, and R.P. Rhoads. Heat stress management. Proceedings of 3rd International Symposium on Dairy Cow Nutrition and Milk Quality. Beijing China. 170-180.

Baumgard, L.H., **M. Abuajamieh**, S.K. Stoakes, M.V. Sanz-Fernandez, J.S. Johnson, D.B. Snider and R.P. Rhoads. 2013. The biology of heat stress and potential mitigation strategies to minimize its impact. Proceedings of the Ontario Association of Bovine Practitioners. Pp.13-25

ABSTRACTS

Hines, E.A., J.T. Seibert, S.K. Stoakes, K.L. Graves, B.J. Hale, **M. Abuajamieh**, C.L. Hager, C. Rademacher, L.H. Baumgard, A.F. Keating, and J.W. Ross. 2016. Evaluation of physiological indicators of heat stress and their association with seasonal infertility in first parity sows. *J. Anim. Sci.* 94(E-Suppl. 2):334

Mayorga, E.J., S.K. Stoakes, J.T. Seibert, E.A. Horst, **M. Abuajamieh**, S. Lei, L. Ochoa, B. Kremer and L.H. Baumgard. 2016. Effects of dietary chromium propionate during heat stress on finishing pigs. *J. Anim. Sci.* 94(E-Suppl. 2):306

Kvidera, S. K., E. A. Horst, E. J. Laughlin, J. Mayorga, J. T. Seibert, **M. Abuajamieh**, A. Keating, J. Ross, and L. H. Baumgard. 2016. Effects of repeated lipopolysaccharide infusion on hematologic, metabolic, and intestinal histology parameters. *FASEB J.* 30.925.14

Abuajamieh, M., S. K. Stoakes, M. V. Sanz Fernandez, J. S. Johnson, J. T. Seibert, E. A. Nolan, S. M. Lei, H. B. Green, K. M. Schoenberg, W. E. Trout, and L. H. Baumgard. 2015. Characterizing the temporal pattern of leaky gut biomarkers in healthy and ketotic cows during the transition period. 98(E-Suppl. 2):876.

Baumgard, L. H., S. K. Stoakes, **M. Abuajamieh**, and R. P. Rhoads. 2015. The contribution of the lower gut to altered nutrient partitioning during stress. *J. Dairy Sci.* 98(E-Suppl. 2):560.

Stoakes, S. K., E. A. Nolan, D. J. Valko, **M. Abuajamieh**, J. T. Seibert, M. V. Sanz Fernandez, P. J. Gorden, H. B. Green, K. M. Schoenberg, W. E. Trout, and L. H. Baumgard. 2015. Characterizing the effect of feed restriction on biomarkers of leaky gut. *J. Dairy Sci.* 98(E-Suppl. 2):274.

Stoakes, S. K., E. A. Nolan, D. J. Valko, **M. Abuajamieh**, M. V. Sanz Fernandez, and L. H. Baumgard. 2015. Estimating glucose requirements of an activated immune system in Holstein steers. *J. Dairy Sci.* 98(E-Suppl. 2):21.

Stoakes, S. K., E. A. Nolan, **M. Abuajamieh**, M. V. Sanz Fernandez, and L. H. Baumgard. 2015. Estimating glucose requirements of an activated immune system in growing pigs. *J. Animal Sci.* 93(E-Suppl. S3):634.

Stoakes, S. K., E. A. Nolan, D. J. Valko, **M. Abuajamieh**, E. J. Mayorga, J. T. Seibert, M. V. Sanz Fernandez, P. J. Gorden, and L. H. Baumgard. 2015. Estimating glucose requirements of an activated immune system in lactating Holstein cows. *J. Dairy Sci.* 98(E-Suppl. 2):509.

Baumgard, L.H. Stoakes, S K. **Abuajamieh, M.** and Rhoads, R.P. 2015. The contribution of the lower gut to altered nutrient partitioning during stress. *ADSA Production Division Symposium: The rumen and beyond— Nutritional physiology of the modern dairy cow.* *J. Dairy Sci.* 98(E-Suppl. 2):560.

Stoakes, S.K., E.A. Nolan, **M. Abuajamieh**, M.V. Sanz Fernandez, J.S. Seibert and L.H. Baumgard. Estimating glucose requirements of an activated immune system in growing pigs. Global Food Security Consortium (GFSC). April 14th-15th, 2015. Ames, IA

Abuajamieh, M., E. Laughlin, S. M. Lei, S. K. Stoakes, E. J. Mayorga, J. T. Seibert, E. Nolan, M. V. Sanz-Fernandez, J. Ross, J. Selsby, R. Rhoads and L. H. Baumgard. 2015. The Effects of Recovery Time from Heat Stress on Circulating Bioenergetic Variables and Biomarkers of Leaky Gut. FASEB J. 29(E-Suppl. S3): LB365.

Seibert, J. T., **M. Abuajamieh**, M.V. Sanz Fernandez, J.S. Johnson, S.K. Stoakes, J.F. Patience, J.W. Ross, R.P. Rhoads, S.M. Lonergan, L.H. Baumgard. 2015. Effects of heat stress on adipose tissue fatty acid composition and moisture content in pigs. J. Anim. Sci. 93(E-suppl. 2):175.

Abuajamieh, M., S.K. Stoakes, V. Sans-Fernandez, J.S. Johnson, P.J. Gorden, D. M. McKilligan and L.H. Baumgard. 2014. A comparison between propylene glycol and a multiple component drench on energetic variables in early lactating Holstein cows. J. Dairy Sci. 97(E-Suppl. 1):357.

Johnson, J. T., **M. Abuajamieh**, M.V. Sanz Fernandez, J.T. Seibert, S.K. Stoakes, A.F. Keating, J.W. Ross, J.T. Selsby, R.P. Rhoads, and L.H. Baumgard. 2014. The impact of *in utero* heat stress and nutrient restriction on progeny body composition. J. Anim. Sci. 92. (E-Suppl. 2):583.

Sanz-Fernandez, M. V., J. S Johnson, **M. Abuajamieh**, S. K Stoakes, S. M Lei, R. P Rhoads, and L. H Baumgard. 2014. Effects of heat stress on pancreatic insulin content and β -cell distribution in growing pigs. J. Anim. Sci. 92(E-Suppl. 2):257.

Stoakes, S. K., **M. Abuajamieh**, D. B. Snider, V. Sans-Fernandez, J. S. Johnson, P. J. Gorden, N. K. Gabler, H. B. Green, K. M. Schoenberg and L. H. Baumgard. 2014. The effects of intentionally-induced leaky gut on metabolism and production in lactating Holstein dairy cows. J. Dairy Sci. 97(E-Suppl. 1):101.

Stoakes, S. K, **M. Abuajamieh**, M. V. Sanz-Fernandez, J. S. Johnson, D. B. Snider, R. P. Rhoads, and L. H. Baumgard. 2013. Predictors of the heat stress response in lactating Holstein cows. J. Anim. Sci. 91(Suppl. 2):710.

Johnson, J. T., M. V. Sanz-Fernandez, S. K. Stoakes, **M. Abuajamieh**, J. W. Ross, M. C. Lucy, T. J. Safranski, R. P. Rhoads, L. H. Baumgard. 2013. Gestational heat stress alters postnatal thermoregulation. J. Anim. Sci. 91(E-Suppl. 2):168.

Sanz-Fernandez, M. V., J. S Johnson, **M. Abuajamieh**, S. K. Stoakes, A. L Gabler, S. M Lei, Mateus Zucato Toledo, R. P Rhoads, and L. H Baumgard. 2013. Effects of heat stress on the response to metabolic challenges in growing pigs. FASEB J. (E-Suppl. 365.8).

GRANTS

Title	Grantor	Year Rec'd	Year Term.	Amount
Effect of Organic Zinc on the Performance and Gut Integrity in Poultry under Heat Stress Conditions	JU Dean of Scientific Research	2016	2018	\$24,000
Heat stress effects on small ruminants supplemented with some microminerals	JU Dean of Scientific Research	Pending	Pending	Pending

HONORS AND AWARDS

- 2014/2015 Ned S. and Esther Raun Graduate Scholarship. Iowa State University, Ames, IA
- Member of Gamma Sigma Delta since 2014
- 2013/2014 Ned S. and Esther Raun Graduate Scholarship. Iowa State University, Ames, IA
- 2012 A scholarship from the University of Jordan to complete the Ph.D degree, Amman, Jordan
- 2008 A scholarship from the University of Jordan to complete the M.Sc degree, Amman, Jordan
- 2007/2008 Ministry of higher education and scientific research scholarship, Amman, Jordan

INTERNATIONAL VISITS AND CONFERENCES

1. Joint Annual Meeting (ASAS/ADSA) July 12nd -16th, 2015. Orlando, FL.
2. Four-State Dairy Nutrition and Management Conference. June 10th-11st, 2015. Dubuque, IA.
3. Heat Stress Biannual Symposium (member of the organizing committee and presenter): Metabolic and production consequences of heat stress in ruminants. April 16th-17th, 2015. Ames, IA.
4. Global Food Security Consortium. April 14th-15th, 2015. Ames, IA
5. Experimental biology (EB) meeting March 28th -April 1st. 2015. Boston, MA
6. Joint Annual Meeting (ASAS/ADSA) July 20th-24th, 2014. Kansas city, MO.
7. Seasonal infertility project (second part), Murphy Brown LLC. March 30th-April 13th, 2014. Beaver, UT
8. ADSA-ASAS Midwest Meeting. March 17th-19th, 2014. Des Moines, IA
9. Seasonal infertility project (first part), Murphy Brown LLC. July 13th-30th, 2013. Milford, UT
10. Joint Annual Meeting (ASAS/ADSA) July 8th-12nd, 2013. Indianapolis, IN.
11. Four-State Dairy Nutrition and Management Conference. June 12nd-13th, 2013. Dubuque, IA.
12. Heat Stress Biannual Symposium. April 4th-5th, 2013. Ames, IA
13. World Dairy Expo. October 2nd-6th, 2012. Madison, WI

LANGUAGES

Arabic (Mother tongue)

English (Excellent in reading, writing and speaking)

MEMBERSHIPS

- Agricultural Engineering Association (2008-present)
- Animal Science Dairy Association (ADSA) (2012-2015)
- Association of Graduate Animal Scientists (2012-2015)
- Gamma Digma Delta (Since 2014)