

Curriculum Vitae: Lance H. Baumgard Ph.D.

Iowa State University
313 Kildee Hall
Ames IA, 50011-3150

O: (515) 294-3615
F: (515) 294-3795
baumgard@iastate.edu

Education:

- January 2002 Ph.D. in: Animal Science from Cornell University, Ithaca, NY
Minors: Nutritional Biochemistry and Physiology
Advisor: Dr. Dale E. Bauman
- March 1998 M.S. in: Animal Science from the University of Minnesota, St. Paul
Concentration: Nutritional Physiology
Advisor: Dr. Brian A. Crooker
- March 1995 B.S. in: Science in Agriculture from the University of Minnesota, St. Paul
- May 1992 A.A. Worthington Community College, Worthington MN

Experience:

- Professor: 2014 - present
Norman L. Jacobson Endowed Professor of Nutritional Physiology
Department of Animal Science, Iowa State University, Ames
- Associate Professor: 2009-2014
Norman L. Jacobson Endowed Professor of Nutritional Physiology
Department of Animal Science, Iowa State University, Ames
- Associate Professor: 2007-2009 (joint appointment)
Department of Animal Sciences, The University of Arizona, Tucson
Department of Nutritional Sciences, The University of Arizona, Tucson
- Assistant Professor: March 2002 – 2007: (joint appointment)
Department of Nutritional Sciences, The University of Arizona, Tucson
- Member of The University of Arizona Interdisciplinary Physiology Program.
September 2002 – 2009
- Assistant Professor: September 2001 - 2007
Department of Animal Sciences, The University of Arizona, Tucson

Research Emphasis:

Nutritional & Environmental Physiology

Professional Memberships:

American Dairy Science Association
Gamma Sigma Delta
American Society for Nutrition

American Society of Animal Science
Sigma Xi, Research Society

Editorial Boards:

Domestic Animal Endocrinology 2016-present
Journal of Animal Science 2004-2007
Journal of Dairy Science 2005-present
Annual Review of Animal Biosciences 2020-present

Member of the Board of Directors for:

National Animal Interest Alliance (NAIA): Portland Oregon 2009 to 2015
Not for profit organization: www.naiaonline.org

PUBLICATIONS

REFEREED JOURNAL ARTICLES

172. Goetz, B.M., J. Lefler, M.A. Abeyta, E.A. Horst, E.J. Mayorga, M. Al-Qaisi, S. Rodriguez-Jimenez, C. Martino, A. Izzo, R. La, H.B. Green, C.E. Moore, M. Embree and **L.H. Baumgard**. 2021. Effects of dietary microbial feed supplement on production efficacy in lactating dairy cows. *J. Dairy Sci. Comm.* (in press)
171. Pate, R.T., D. Luchini, J.P. Cant, **L.H. Baumgard** and F.C. Cardoso. 2021. Rumen-protected methionine aided in mammary cell preservation and immunoactivation during a heat stress challenge. *J. Dairy Sci.* (submitted).
170. Fausnacht, D.W., K.A. Kroscher, R.P. McMillan, L.S. Martello, K.P. Davy, **L.H. Baumgard**, J.T. Selsby, M.W. Hulver, and R.P. Rhoads. 2021. Heat stress reduces metabolic rate while increasing respiratory exchange ratio in growing pigs. *Animals*: 11:215. <https://doi.org/10.3390/ani11010215>
169. Opgenorth, J., M. Abuajamieh, E. A. Horst, S. K. Kvidera, J. S. Johnson, E. J. Mayorga, M. V. Sanz-Fernandez, M. A. Al-Qaisi, J. M. DeFrain, D.H. Kleinschmit, P. J. Gorden, and **L. H. Baumgard**. 2021. The effects of zinc amino acid complex on biomarkers of gut integrity, inflammation, and metabolism in heat-stressed ruminants. *J. Dairy Sci.* 104:2410-2421.
168. Hale, B.J., Y. Li, M.K. Adur, A.F. Keating, **L.H. Baumgard**, and J.W. Ross. 2020. Characterization of the effects of heat stress on autophagy induction in the oocyte. *J. Anim. Sci. Biotech.* (submitted)
167. Romoser, M.R., T. Gall, **L.H. Baumgard**, A.F. Keating, K.J. Stalder, and J.W. Ross. 2020. Evaluating the efficacy of visual assessment of gilt vulva size prior to puberty on subsequent reproductive performance. *Applied Anim. Sci.* 36:694-700.
166. Horst, E.A., E.J. Mayorga, M. Al-Qaisi, S. Rodriguez-Jimenez, B.M. Goetz, M.A. Abeyta, P.J. Gorden, S.K. Kvidera, and **L.H. Baumgard**. 2020. Evaluating effects of zinc hydroxychloride on biomarkers of inflammation and intestinal integrity during feed restriction. *J. Dairy Sci.* 103:11911-11929.
165. Al-Qaisi, M., E.A. Horst, E.J. Mayorga, B.M. Goetz, M.A. Abeyta, I. Yoon, L.L. Timms, J.A. Appuhamy and **L.H. Baumgard**. 2020. Effects of *saccharomyces cerevisiae* fermentation product on heat-stressed dairy cows. *J. Dairy Sci.* 103:9634-9645.
164. Al-Qaisi, M., E.A. Horst, S.K. Kvidera, C.S. McCarthy, E.J. Mayorga, M.A. Abeyta, B. Goetz, N.C. Upham, D.M. McKilligan, B.W. Kolstad, L.L. Timms and **L.H. Baumgard**. 2020. Effects of dietary electrolytes, osmolytes, and energetic compounds on body temperature indices in heat-stressed lactating dairy cows. *Res. Vet. Sci.* 132:42-48.
163. Horst, E.A., L.M. van den Brink, E.J. Mayorga, M. Al-Qaisi, S. Rodriguez-Jimenez, B.M. Goetz, M.A. Abeyta, S.K. Kvidera, L.S. Caixeta, R.P. Rhoads, and **L.H. Baumgard**. 2020. Evaluating acute inflammation's effects on hepatic triglyceride content in hyperlipidemic lactating dairy cows. *J. Dairy Sci.* 103:9620-9633
162. Mayorga, E.J., J.W. Ross, A.F. Keating, R.P. Rhoads, and **L.H. Baumgard**. 2020. Biology of heat stress; the nexus between intestinal hyperpermeability and swine reproduction. *Theriogenology.* 154:73-83.
161. Johnson, J.S., K.R. Stewart, T.J. Safranski, J.W. Ross, and **L.H. Baumgard**. 2020. In utero heat stress alters postnatal phenotypes in swine. *Theriogenology:* 154:110-119.
160. Horst, E.A., E.J. Mayorga, M. Al-Qaisi, M.A. Abeyta, S.L. Portner, C.S. McCarthy, B.M. Goetz, S.K. Kvidera, and **L.H. Baumgard**. 2020. Effects of maintaining eucalcemia following immunoactivation in lactating Holstein dairy cows. *J. Dairy Sci.* 103:7472-7486.
159. McCarthy, C.S., B.C. Dooley, E.H. Branstad, A.J. Kramer, E.A. Horst, E.J. Mayorga, M. Al-Qaisi, M.A. Abeyta, G. Perez-Hernandez, B.M. Goetz, A.R. Castillo, M.R. Knobbe, C.A. Macgregor, J.P. Russi, J.A.D.R.N. Appuhamy, H.A. Ramirez-Ramirez and **L.H. Baumgard**. 2020. Energetic metabolism, milk

production and inflammatory response of transition dairy cows fed rumen-protected glucose. *J. Dairy Sci.* 103:7451-7461.

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157. Al-Qaisi, M., E.J. Mayorga, E.A. Horst, S.K. Kvidera, C.S. McCarthy, M.A. Abeyta, B.M. Goetz, H.A. Ramirez-Ramirez, L.L. Timms, and **L.H. Baumgard**. 2020. Validating a heat stress model: The effects of an electric heat blanket (EHB) and nutritional plane on lactating dairy cows. *J. Dairy Sci* 103:5550-5560.
156. Al-Qaisi, M., S.K. Kvidera, E.A. Horst, C.S. McCarthy, E.J. Mayorga, M.A. Abeyta, B.M. Goetz, N.C. Upah, D.M. McKilligan, H.A. Ramirez- Ramirez, L.L. Timms, and **L.H. Baumgard**. 2020. Effects of an oral supplement containing calcium and live yeast on post-absorptive metabolism, inflammation and production following intravenous lipopolysaccharide infusion in dairy cows. *Res. Vet. Sci.* 129:74-81.
155. Romoser, M.R., B.J. Hale, J.T. Seibert, T. Gall, C.R. Rademacher, K.J. Stalder, **L.H. Baumgard**, A.F. Keating and J.W. Ross. 2019. Methods for reproductive tract scoring as a tool for improving sow productivity. *Transl. Anim. Sci.* 4:275-284.
154. Horst, E.A., S.K. Kvidera, M. Abuajamieh, E.J. Mayorga, M. Al-Qaisi, and **L.H. Baumgard**. 2019. Short Communication: Ketosis, feed restriction, and an endotoxin challenge do not affect circulating serotonin (5-HT) in lactating dairy cows. *J. Dairy Sci.* 102:11736-11743
153. Horst, E.A., E.J. Mayorga, M. Al-Qaisi, M.A. Abeyta, B.M. Goetz, H.A. Ramirez Ramirez, D.H. Kleinschmit, and **L.H. Baumgard**. 2019. Effects of dietary zinc source on the metabolic and immunological response to lipopolysaccharide in lactating Holstein dairy cows. *J. Dairy Sci.* 102:11681-11700.
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150. Bidne, K.L., M.R. Romoser, J.W. Ross, **L.H. Baumgard** and A.F. Keating. 2019. Heat stress during the luteal phase decreases luteal size but does not impact circulating progesterone in gilts. *J. Anim. Sci.* 97: 3626-3635.
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144. Horst, E.A., S.K. Kvidera, M.J. Dickson, C.S. McCarthy, E.J. Mayorga, M. Al-Qaisi, H.A. Ramirez, A.F. Keating, and **L.H. Baumgard**. 2019. Effects of continuous and increasing lipopolysaccharide infusion on basal and stimulated metabolism in lactating Holstein cows. *J. Dairy Sci.* 102:3584-3597.
143. Mayorga, E.J., S.K. Kvidera, J.T. Seibert, E.A. Horst, M. Abuajamieh, M. Al-Qaisi, J.W. Ross, C.D. Johnson, B. Kremer, L. Ochoa, R.P. Rhoads, and **L.H. Baumgard**. 2019. Effects of dietary chromium propionate on growth performance, metabolism, and immune biomarkers in heat-stressed finishing pigs. *J. Anim. Sci.* 97:1185-1197.
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141. Mayorga, E.J., D. Renaudeau, B.C. Ramirez, J.W. Ross and **L.H. Baumgard**. 2019. Heat stress adaptations in pigs. *Anim. Frontiers.* 9:54-61.
140. Al-Qaisi, M., E.A. Horst, S.K. Kvidera, E.J. Mayorga, L.L. Timms and **L.H. Baumgard**. 2019. Technical note: Developing a heat stress model in dairy cows using an electric heat blanket. *J. Dairy Sci.* 102:684-689.
139. Sun, L.L., S.T. Gao, K. Wang, J.C. Xu, M.V. Sanz Fernandez, **L.H. Baumgard** and D.P. Bu. 2019. Effects of source on selenium's bioavailability, antioxidant status and performance in lactating dairy cows during oxidative stress-inducing conditions. *J. Dairy Sci.* 102:311-319.
138. Zhao, L., R. McMillan, G. Xie, S. Giridhar, **L.H. Baumgard**, S. El-Kadi, J.T. Selsby, N.K. Gabler, M. Hulver, and R.P. Rhoads. 2018. Heat stress decreases metabolic flexibility in skeletal muscle of growing pigs. *Am. J. Phys. Reg. Integ. Comp. Phys.* 315:R1096-R1106.
137. Abuajamieh, M., S.K. Kvidera, E.J. Mayorga, A. Kaiser-Vry, S.M. Lein, J. T. Seibert, E.A. Horst, M.V. Sanz Fernandez, J.W. Ross, J.T. Selsby, A.F. Keating, R.P. Rhoads and **L.H. Baumgard**. 2018. The effect of recovery from heat stress on circulating bioenergetics and inflammatory biomarkers. *J. Anim. Sci.* 96:4599-4610.
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135. Dickson, M.J., C.L. Hager, A. Al-Shaibi, P.Q. Thomas, **L.H. Baumgard**, J.W. Ross and A.F. Keating. 2018. Impact of heat stress during the follicular phase on porcine ovarian steroidogenic and phosphatidylinositol-3 signaling. *J. Anim. Sci.* 96:2162-2174.
134. Bidne, K.L., S.S. Kvidera, J.W. Ross, **L.H. Baumgard**, and A.F. Keating. 2018. Impact of repeated lipopolysaccharide administration on ovarian signaling during the follicular phase of the estrous cycle in post-pubertal pigs. *J. Anim. Sci.* 96: 3622-3634.
133. Ganesan, S., A.J. Brownstein, S.C. Pearce, M.B. Hudson, N.K. Gabler, **L.H. Baumgard**, R.P. Rhoads and J.T. Selsby. 2018. Prolonged environment-induced hyperthermia alters autophagy in oxidative skeletal muscle in *Sus scrofa*. *J. Therm. Biol.* 74: 160-169.
132. Ganesan, S., S.C. Pearce, N.K. Gabler, **L.H. Baumgard**, R.P. Rhoads and J.T. Selsby. 2018. Short-term heat stress results in increased apoptotic signaling and autophagy in oxidative skeletal muscle in *Sus scrofa*. *J. Therm. Bio.* 72:73-80.
131. Seelenbinder, K.M., L.D. Zhao, M.D. Hanigan, M.W. Hulver, R.P. McMillan, **L.H. Baumgard**, J.T. Selsby, J.W. Ross, N.K. Gabler, and R.P. Rhoads. 2018. Effects of heat stress during porcine reproductive and respiratory syndrome virus infection on metabolic responses in growing pigs. *J. Anim. Sci.* 96: 1375-1387.
130. Ganesan, S., C.M. Summers, S.C. Pearce, N.K. Gabler, R.J. Valentine, **L.H. Baumgard**, R.P. Rhoads, J.T. Selsby. 2018. Short term heat stress altered metabolism and insulin signaling in skeletal muscle. *J. Anim. Sci.* 96:154-167.

129. Horst, E.A., S.K. Kvidera, E.J. Mayorga, C.S. Shouse, M. Al-Qaisi, M.J. Dickson, J. Ydstie, H.A. Ramirez Ramirez, K.E. Griswold, and **L.H. Baumgard**. 2018. Effect of chromium on bioenergetics and leukocyte dynamics following immunoactivation in lactating Holstein cows. *J. Dairy Sci.* 101:5515-5530.
128. Kim, K.S, J.T. Seibert, Z. Edea , K.L. Graves, E.S. Kim, A.F. Keating, **L.H. Baumgard**, J.W. Ross, and M.F. Rothschild. 2018. Characterizing the acute heat stress response in gilts: III. Identification of underlying genomic control. *J. Anim. Sci.* 96: 2074-2085.
127. Bidne, K.L., M.J. Dickson, J.W. Ross, **L.H. Baumgard** and A.F. Keating. 2018. Disruption of female reproductive function by endotoxins. *Reprod.* 155:R169-R181.
126. Graves, K.L., J.T. Seibert, A.F. Keating, **L.H. Baumgard**, and J.W. Ross. 2018. Characterizing the acute heat stress response in gilts: II. Assessing repeatability and association with fertility. *J. Anim. Sci.* 96: 2419-2426.
125. Seibert, J.T., K.L. Graves, B.J. Hale, A.F. Keating, **L.H. Baumgard**, and J.W. Ross. 2018. Characterizing the acute heat stress response in gilts: I. Thermoregulatory and production variables. *J. Anim. Sci.* 96: 941-949.
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122. **Baumgard, L.H.**, R.J. Collier and D.E. Bauman. 2017. Invited Review: Regulation of nutrient partitioning to support lactation. *J. Dairy Sci.* 100:10353-10366.
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120. Kvidera, S.K., E.A. Horst, M.V. Sanz-Fernandez, M. Abuajamieh, S. Ganesan, P.J. Gorden, H.B. Green. K.M. Schoenberg, W.E. Trout, A.F. Keating, and **L.H. Baumgard**. 2017. Characterizing effects of feed restriction and glucagon-like peptide 2 administration on biomarkers of inflammation and intestinal morphology. *J. Dairy Sci.* 100: 9402-9417.
119. Hale, B.J., C.L. Hager, J.T. Seibert, J.T. Selsby, **L.H. Baumgard**, A.F. Keating and J.W. Ross. 2017. Heat stress induces autophagy in pig ovaries during follicular development. 2017. *Biol. Reprod.* doi: 10.1093/biolre/iox097
118. Cruzen, S.M., **L.H. Baumgard**, N.K. Gabler, S.C. Pearce and S.M. Lonergan. 2017. Temporal proteomic response to acute heat stress in the porcine muscle sarcoplasm. *J. Anim. Sci.* 95:3961-3971
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116. Ganesan, S., O. Volodina, S.C. Pearce, N.K. Gabler, **L.H. Baumgard**, R.P. Rhoads, and J.T. Selsby. 2017. Acute heat stress activated inflammatory signaling in porcine oxidative skeletal muscle. *Physiol. Rep.* doi: 10.14814/phy2.13397
115. Hristov, A.N., A.T. Degaetano, C.A. Rotz, E. Hoberg, R.H. Skinner, T. Felix, H. Li, P.H. Patterson, G. Roth, M. Hall, T.L. Ott, **L.H. Baumgard**, W. Staniar, R.M. Hulet, C. Dell, A.F. Brito, and D.Y. Hollinger. 2017. Climate change effects on livestock in the Northeast U.S. and strategies for adaptation. *Climatic Change.* 143: doi:10.1007/s10584-017-2023-z
114. Ross, J.W., J.T. Seibert, M.K. Adur, M.R. Romoser, **L.H. Baumgard**, and A.F. Keating. 2017. Reproductive consequences of heat stress in pigs. 2017. *Mol. Reprod. Dev.* 84:934-945

113. Brownstein, A., S. Ganesan, C. Summers, S.C. Pearce, B. Hale, J.W. Ross, N.K. Gabler, J.T. Seibert, R.P. Rhoads, **L.H. Baumgard**, and J.T. Selsby. 2017. Heat stress causes dysfunctional autophagy in oxidative skeletal muscle. *Physiol. Rep.* 5: pii: e13317. doi: 10.14814/phy2.13317
112. Ganesan, S., C.M. Summers, S.C. Pearce, N.K. Gabler, R.J. Valentine, **L.H. Baumgard**, R.P. Rhoads, and J.T. Selsby. 2017. Short-term heat stress causes altered intracellular signaling in oxidative skeletal muscle. *J. Anim. Sci.* 95:2438-2451.
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18. Upah, N., S. Pearce, N. Gabler and **L.H. Baumgard**. 2011. Effects of heat stress and plane of nutrition on production and metabolism in growing pigs. <http://www.ans.iastate.edu/report/air/2011pdf/R2663.pdf>
17. Bilby, T.R., **L.H. Baumgard** and R.J. Collier. 2008. The impact of heat stress on pre- and postpartum periods that impact reproductive performance: Causes, consequences and solutions. Arizona & New Mexico Dairy Newsletter, February 2008.
16. Burgos, R., L.J. Odens, R.J. Collier, **L.H. Baumgard** and M.J. VanBaale. 2007. Evaluation of different cooling systems in lactating heat stressed dairy cows in a semi-arid environment. Arizona & New Mexico Dairy Newsletter, April 2007.
15. **Baumgard, L.H.**, L.J. Odens, J.K. Kay, R.P. Rhoads, M.J. VanBaale and R.J. Collier. 2006. Does negative energy balance (NEBAL) limit milk synthesis in early lactation? Arizona & New Mexico Dairy Newsletter, July 2006.
14. VanBaale, M.J., J.F. Smith, M.J. Brouk and **L.H. Baumgard**. 2006. Evaluate the efficacy of your cooling system through core body temperature. Arizona Livestock Review. Spring, 2006.
13. VanBaale, M.J., J.F. Smith, M.J. Brouk and **L.H. Baumgard**. 2006. Evaluate the efficacy of your cooling system through core body temperature. Arizona & New Mexico Dairy Newsletter April, 2006.
12. VanBaale, M.J., R. Burgos, D. Ledwith, J. Thompson, R.J. Collier and **L.H. Baumgard**. 2005 Effect of increased milking frequency during early lactation on health and performance of lactating dairy cattle. Arizona & New Mexico Dairy Newsletter. October, 2005.
11. Moore, C.E., J.K. Kay, M.J. VanBaale, and **L.H. Baumgard**. 2005. Calculating and improving energy balance during times of nutrient limitations. Arizona & New Mexico Dairy Newsletter. February, 2005.

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9. Fitzgerald, A, E. Annen, **L. Baumgard** and M. VanBaale. Increased milking frequency. Arizona & New Mexico Dairy Newsletter. October 2003.
8. Moore, C.E. and **L.H. Baumgard**. Controlled milk fat depression as a management tool in the southwest dairy industry. Arizona Livestock Review. July 2003
7. Moore, C.E., H.C. Haflinger III, A.C. Fitzgerald, O.B. Mendivil and **L.H. Baumgard**. Increasing somatic cell counts progressively decreases milk production even at “acceptable levels” Arizona & New Mexico Dairy Newsletter. February 2003.
6. **Baumgard, L.H.** and J.E. English. Economics of delayed castration. Arizona Livestock Review. July 2002.
5. **Baumgard, L.H.** and E. Annen. Economics of intentional milk fat depression. Arizona Livestock Review. April 2002
4. **Baumgard, L.H.** and E. Annen. Economics of intentional milk fat depression. Arizona & New Mexico Dairy Newsletter. January 2002
3. **Baumgard, L.H.** Healthy Animal Fat? Arizona Livestock Review. January 2002.
2. **Baumgard, L.H.** Beneficial Milk Fat. Arizona & New Mexico Dairy Newsletter. October 2001.
1. **Baumgard, L.H.**, B.A. Corl and D.E. Bauman. Effect of CLA isomers on fat synthesis during growth and lactation. Arizona & New Mexico Dairy Newsletter. September 2001

Articles in Trade Magazines

7. Rudolph, T., R.P. Rhoads, **L.H. Baumgard** and J.T. Selsby. 2019 Why we should sweat heat stress. National Hog Farmer. December 4th. <https://www.nationalhogfarmer.com/animal-health/why-we-should-sweat-heat-stress>
6. **Baumgard, L.H.**, R.P. Rhoads and C.E. Moore. 2007. The effects of heat stress on production and its nutritional implications. Elanco and Monsanto Tech Talk.
5. VanBaale, M.J., J.F. Smith, M.J. Brouk, and **L.H. Baumgard**. 2005 Evaluate the efficacy of your cooling system through core body temperature. Hoards Dairyman: Western Dairy News. Aug 5:W147-W148.
4. VanBaale, M.J., and **L.H. Baumgard**. 2005. Effect of Forage quality during the transition period. Western dairy news, February, vol 5, no. 2 pgs W45-W46.
3. VanBaale, M.J. and **L.H. Baumgard**. 2004. Effects of Forage quality through the transition period. Monsanto Dairy Transition Tool Box. Monsanto Dairy Business, St Louis, MO.
2. **Baumgard, L.H.** and E. Annen. 2002. Economics of intentional milk fat depression. The Progressive Dairyman. March 2002 pp 17-19.
1. **Baumgard, L.H.** Beneficial milk fat. The Progressive Dairyman. January 2002. pp 55-56.

Invited Presentations

242. **Baumgard, L.H.** 10-29-20. Ketosis is not a disease. 39th ADSA Discover Conference. Virtual.
241. **Baumgard, L.H.** 10-27-20. Inflammation and Immune Function. 39th ADSA Discover Conference. Virtual.
240. **Baumgard, L.H.** 10-14-20. Causes and Metabolic Consequences of Leaky Gut. Australian Association of Ruminant Nutrition. Virtual webinar.

239. **Baumgard, L.H.** 10-14-20. Inflammation and Calcium Homeostasis: Potential Implications for the Transition Period. Australian Association of Ruminant Nutrition. Virtual webinar.
238. **Baumgard, L.H.** 10-7-20. The What, Why and Physiologic Cost of Leaky Gut Syndrome. Swine Talks Web Conference 2020.
237. **Baumgard, L.H.** 2-7-20. Re-evaluating transition cow hypophagia, subclinical hypocalcemia, and hyperketonemia. Southwest Nutrition Conference. Chandler AZ.
236. **Baumgard, L.H.** 1-18-20. Causes and consequences of intestinal barrier dysfunction in dairy cows. Leipzig Veterinary Conference. Leipzig Germany.
235. **Baumgard, L.H.** 10-23-19. Inflammation and calcium homeostasis: Potential implications for the transition period. Cornell Nutrition Conference. Syracuse NY.
234. **Baumgard, L.H.** 10-22-19. Causes and consequences of leaky gut. Cornell Nutrition Conference. Syracuse NY
233. **Baumgard, L.H.** 9-20-19. Causes and consequences of leaky gut in dairy cattle. DIGAL Dairy Conference. Delicias Mexico.
232. **Baumgard, L.H.** 9-14-19. The What, Why and Physiologic Cost of Leaky Gut Syndrome. American Association of Bovine Practitioners. St. Louis MO
231. **Baumgard, L.H.,** 8-26-19. The intestinal, metabolic, inflammatory and production responses to heat stress. 70th Annual Meeting of the European Federation of Animal Science (EAAP), Gent Belgium.
230. **Baumgard, L.H.,** 7-24-19. Heat stress, consequences of gut barrier dysfunction. International Symposium on Biodiversity in the Global Food System. Hokkaido University, Sapporo Japan.
229. **Baumgard, L.H.,** 6-27-19. Causes of leaky gut and the metabolic and production consequences of it. Iowa Swine Day, Ames IA.
228. **Baumgard, L.H.** 5-28-19. Heat stress, consequences of gut barrier dysfunction. International Dairy Cattle Welfare and Nutrition Conference. Jerusalem Israel.
227. **Baumgard, L.H.,** 5-23-19. Causes and consequences of leaky gut. Congreso Internacional ANEMBE de Medicina Bovina. Seville Spain.
226. **Baumgard, L.H.,** 3-6-19. Leaky gut's contribution to heat stress and ketosis. Penn State Veterinary Extension Seminar Series. Harrisburg PA.
225. **Baumgard, L.H.,** 1-15-19. Impact of chronic inflammation on the health of dairy cattle, swine and beef cattle. Pacific Northwest Animal Nutrition Conference. Boise ID
224. **Baumgard, L.H.** 1-14-19. Metabolic consequences of leaky gut. Pacific Northwest Animal Nutrition Conference. Boise ID
223. **Baumgard, L.H.** 10-31-18. Situations that create leaky gut and the energetic cost of immune activation. 35th ADSA Discover Conference. Effects of Stress on Production and Health of Dairy Cows. Itasca, IL.
222. **Baumgard, L.H.** 10-24-18. Food is not killing us. 2018 Swine Education In-Service. Raleigh, NC.
221. **Baumgard, L.H.** 10-9-18. Leaky gut and the glucose costs of immune activation. Biomin's World Nutrition Forum. Scientific Challenges and Opportunities in the Protein Economy. Cape Town, South Africa.
220. **Baumgard, L.H.** 8-16-18. Heat stress management. International Dairy New Technology Conference. Ningxia, China.
219. **Baumgard, L.H.** 8-14-18. The common etiology between heat stress and ketosis. Hebei Agricultural University. Bao Ding China.
218. **Baumgard, L.H.** 6-8-18. Re-evaluating dogmas of metabolic health in transition dairy cows. Mid-South Ruminant Nutrition Conference. Grapevine TX.
- 217 **Baumgard, L.H.** 4-17-18. Energy requirement of inflammation in dairy cows. 27th annual Tri-State Dairy Nutrition Conference. Ft. Wayne IN.

216. **Baumgard, L.H.** 4-12-18. Contribution of leaky gut to inefficient nutrient partitioning. 7th Annual Bill Thatcher Lectureship. Gainesville FL.
215. **Baumgard, L.H.** 3-28 & 29 2018. Uncovering fresh cow needs: It's more than just calcium. Central Plains Dairy Expo. Sioux Falls SD
214. **Baumgard, L.H.** 3-23-18. The effects of leaky gut on immunometabolism of dairy cows. XXII Curso Novos Enfoques Na Producao E reproducao de bovinos. Uberlandia, Brazil.
213. **Baumgard, L.H.** 3-22-18. Effects of heat stress on metabolism and productivity. XXII Curso Novos Enfoques Na Producao E reproducao de bovinos. Uberlandia, Brazil.
212. **Baumgard, L.H.** 3-13-18. Heat stress: effects of gut barrier dysfunction. Midwest ASAS/ADSA Ruminant Nutrition Symposium. Omaha NB.
211. **Baumgard, L.H.** 2-8-18. Feed the beast: Energetic requirements of the immune system. 33rd Annual Southwest Nutrition Conference. Chandler, AZ
210. **Baumgard, L.H.** 1-19-18. Ketosis: What's up with the guts? Form-A-Feed dairy producer annual meeting. Red Wing MN
209. **Baumgard, L.H.** 1-18-18. Heat stress: metabolic and production consequences. Form-A-Feed dairy producer annual meeting. Red Wing MN.
208. **Baumgard, L.H.** 1-5-18. Dietary myths of dairy food products. Iowa State Dairy Association. Ames IA,
207. **Baumgard, L.H.** 11-15-17. Heat stress, leaky gut and inflammation- the glucose cost and role of zinc to modulate. Zinpro sponsored International Inflammation Symposium. Rome, Italy.
206. **Baumgard, L.H.** 10-26-17. Challenging the paradigm of metabolic diseases in the fresh period. Wageningen University. New Perspectives on Transition Cow Management. International Dairy Nutrition Symposium. The Netherlands.
205. **Baumgard, L.H.** 10-7-17. Metabolic coordination during heat stress. Dr. Bob Collier's retirement science symposia. Tucson, AZ.
204. **Baumgard, L.H.** 7-13-17. Rumen health, when things go wrong. Rumen and Gut Health Forum. American Association of Bovine Practitioners annual meeting. Omaha NB.
203. **Baumgard, L.H.,** 7-13-17. Normal rumen function. Rumen and Gut Health Forum. American Association of Bovine Practitioners annual meeting. Omaha NB.
202. **Baumgard, L.H.,** 7-27-17. Consequences of leaky gut on the immune system, metabolism, physiology and animal performance. Hokkaido University. Global Institution for Collaborative Research and Education. Sapporo Japan.
202. **Baumgard, L.H.,** 6-28-17. Consequences of leaky gut on the immune system, metabolism, physiology and animal performance. ADSA Physiology and Endocrinology Symposium "Mediators of effects of stress on reproduction, growth and lactation" Pittsburgh, PA
201. **Baumgard, L.H.,** 6-27-17. A rational evaluation of the dairy fat debate. ADSA-ASN Nutrition Symposium. "Does the amount and type of fat that you eat matter?" Pittsburgh, PA
200. **Baumgard, L.H.,** 6-25-17. Dr. Dale E. Bauman: Training graduate students and solving the riddle of milk fat depression. ADSA "Dale Bauman Recognition Symposium and Reception" Pittsburgh, PA
199. **Baumgard, L.H.** 6-14-17. Leaky gut's contribution to inefficient nutrient utilization. 4-State Nutrition Conference. Dubuque IA.
198. **Baumgard, L.H.** 6-6-17. The biology of stress in the dairy cow. Wageningen University. Wageningen, Netherlands.
197. **Baumgard, L.H.** 6-5-17. The biology of stress. Ghent University, Ghent Belgium.
196. **Baumgard, L.H.** 5-27-17. Leaky gut's contribution to heat stress and ketosis. Zenoaq Herd Management Seminar. Tokyo Japan.

195. **Baumgard, L.H.** 5-19-17. Nutritional requirements of the immune system of livestock. Vetagro International Forum. Rome Italy.
194. **Baumgard, L.H.,** 5-11-17. Leaky gut's contribution to inefficient nutrient partitioning. Animal Nutrition Conference of Canada. Quebec City.
193. **Baumgard, L.H.,** 5-10-17. Nutritional requirement of immune function of livestock species. Animal Nutrition Conference of Canada. Quebec City.
192. **Baumgard, L.H.,** 4-19-17. An update on heat stress in dairy cattle. Tri-State Dairy Nutrition Conference. Fort Wayne IN.
191. **Baumgard, L.H.,** 4-13-17. Reevaluation of the cause of ketosis. Minnesota Dairy Health Conference. St. Paul, MN
190. **Baumgard, L.H.** 4-3-7. Heat stress, what's the guts got to do with decreased pig performance every summer. Farmers Co-op Society. Sioux Center, IA.
189. **Baumgard, L.H.** 3-29-17. Gut Check – Leaky gut's role in animal health. Central Plains Dairy Expo. Sioux Falls, SD.
188. **L.H. Baumgard.** 3-8-17. Leaky Gut's Contribution to Inefficient Nutrient Utilization? Western Canadian Dairy Seminar, Red Deere Canada.
187. **L.H. Baumgard.** 2-21-17. Effects of heat stress on dairy production. Vermont Dairy Producers Conference. Burlington VT.
186. **L.H. Baumgard.** 2-17-17. Low summer milk fat: Is it the same as diet-induced milk fat depression? 32nd Annual Southwest Nutrition Conference. Tempe, AZ
185. **L.H. Baumgard.** 2-3-17. Calculating the immune system's glucose requirement in response to leaky gut. ISU Dept. Anim. Sci. Departmental seminar. Ames. IA
184. **L.H. Baumgard.** 1-6-17. Dairy Health: What's the Gut Got to Do With It? Purina-Land O Lakes Leading Dairy Producers Conference. Wisconsin Dells, WI.
183. **L.H. Baumgard.** 9-7-16. Leaky gut's contribution to inefficient nutrient utilization. The Poultry Federation. Arkansas Nutrition Conference. Rogers, AR.
182. **L.H. Baumgard.** 8-26-16. Leaky gut's contribution to inefficient nutrient partitioning. Dept. Biomedical Sciences. ISU Vet School. Ames, IA.
181. **L.H. Baumgard.** 7-22-16. Production, biological, and genetic responses to heat stress in ruminants and pigs. ADSA/ASAS "Breeding and genetics Symposium: Resilience of Livestock to Changing Environments" Salt Lake City, UT
180. **L.H. Baumgard.** 6-15-16. Review of Nutrient Partitioning. Four-State Dairy Nutrition and Management Conference. Dubuque IA
179. **L.H. Baumgard.** 6-15-16. Leaky Gut's Contribution to Inefficient Nutrient Utilization. Four-State Dairy Nutrition and Management Conference. Dubuque IA
178. **Baumgard, L.H.,** 6-4-16. Insulin is the master regulator of nutrient partitioning. University National Agraria La Molina. Lima Peru.
177. **Baumgard, L.H.,** 6-3-16. Novel and traditional feed additives and their role in supporting systemic health during heat stress in lactating cows. University National Agraria La Molina. Lima Peru.
176. **Baumgard, L.H.,** 6-3-16. Production and metabolic consequences in dairy cattle. University National Agraria La Molina. Lima Peru.
175. **Baumgard, L.H.,** 5-30-16 to 6-2-16: Short course on thermal biology at the University of Buenos Aires, Argentina.
174. **Baumgard, L.H.** 5-5-16. Leaky gut's contribution to heat stress and poor transition into lactation. California Animal Nutrition Conference. Fresno CA.

173. **Baumgard, L.H.** 5-5-16. Update on dietary fat in humans. California Animal Nutrition Conference. Fresno CA.
172. **Baumgard, L.H.** 4-14-16. Gut health: The gatekeeper to efficient nutrient utilization. Plains Nutrition Council. San Antonio TX.
171. **Baumgard, L.H.** 3-30-16. Effects of heat stress on gut health and immune system nutrient requirements. Central Plains Dairy Expo. Sioux Falls, SD.
170. **Baumgard, L.H.** 3-30-16. Fiber digestion and dairy cow performance. Central Plains Dairy Expo. Sioux Falls, SD.
169. **Baumgard, L.H.** 3-23-16. Heat stress and ketosis: Intestinal permeability and immune system energetics. Mid-Atlantic Nutrition Conference. Hunt Valley MD.
168. **Baumgard, L.H.** 3-9-16. Gut Health's involvement during heat stress and ketosis. Pinal-40 Arizona Agriculture Experience. Chandler AZ.
167. **Baumgard, L.H.** 3-3-16. Gut integrity: implications for health and performance. Animal Feed Manufacturers Association. Sun City, South Africa.
166. **Baumgard, L.H.** 2-23-16. Leaky gut's contribution to heat stress and maladaptation to lactation. 31st Annual Southwest Nutrition Conference. Tempe AZ
165. **Baumgard, L.H.** 10-20-15. Effects of heat stress on feed efficiency. International Conference on Feed Efficiency in Swine. Omaha NB
164. **Baumgard, L.H.** 7-22-15. Assessing the impact of seasonal loss of productivity. National Pork Board summer research meeting. Omaha NB.
163. **Baumgard, L.H.** 7-14-15. The contribution of the lower gut to altered nutrient partitioning. ADSA "The rumen and beyond-nutritional physiology of the modern dairy cow" Symposium. Orlando FL
162. **Baumgard, L.H.** 5-29-15. Effects of heat stress on the immune system, metabolism and nutrition partitioning: implications on reproductive success. XXI Congress of Brazil Animal Reproduction (CBRA). Belo Horizonte Brazil.
161. **Baumgard, L.H.** 5-28-15. Effects of heat stress on intestinal integrity, metabolism and follicular physiology. XXI Congress of Brazil Animal Reproduction (CBRA). Belo Horizonte Brazil.
160. **Baumgard, L.H.** 5-21-15. Decreased productivity and reproduction during the summer; are the guts to blame? United Kingdom's Pig Veterinary Society. Derby England.
159. **Baumgard, L.H.** 5-14-15. Heat stress: Rumen acidosis and plant extract opportunities. CAAS-ICRA joint lab on agroforestry and sustainable animal science workshop. Beijing China
158. **Baumgard, L.H.** 5-9-15. Heat stress: intestinal integrity, the immune system, metabolism and production. 4th International Symposium on Dairy Cow Nutrition and Milk Quality. Beijing China.
157. **Baumgard, L.H.**, 3-17-15. Heat stress: What's the gut go to do with it? 2015 Herd Health and Nutrition Conferences. Liverpool NY.
156. **Baumgard, L.H.**, 2-20-15. Update on dietary fat in humans. 30th Annual Southwest Nutrition Conference. Tempe, AZ
155. **Baumgard, L.H.** 2-12-15. Bioclimatology and adaptation of farm animals to a changing climate. INRA. International Network on Adaptation of Livestock to the Consequences of Climate Change. Paris, France.
154. **Baumgard, L.H.**, 1-13-15. The effects of heat stress on dairy cattle. Georgia Milk Producers Association. Savana GA.
153. **Baumgard, L.H.**, 11-5-14. Reduction of Heat Stress to Improve Production in Cattle. Lima Peru. Ensminger School.
152. **Baumgard, L.H.**, 10-23-14. Physiological adaptations and nutrient utilization under heat stress. Argentina Association of Production Animals (AAPA). Buenos Aires, Argentina.

151. **Baumgard, L.H.**, 9-24-14. Novel and traditional feed additives and their role in supporting systemic health during transition and times of stress- with special emphasis on dairy production. Western Canadian Nutrition Conference. Edmonton Alberta.
150. **Baumgard, L.H.**, 9-17-14. Evaluating compounds with influence in the gut. 75th annual Minnesota Nutrition Conference. Mystic Lake, MN.
149. **Baumgard, L.H.**, 9-16-14. Reducing the impact of seasonal loss in productivity. What's the issue? Allen. D. Leman Swine Conference. St. Paul, MN.
148. **Baumgard, L.H.**, 7-22-14. Current problems with funding PhD programs. ADSA Foundation Symposium. Kansas City, MO.
147. **Baumgard, L.H.**, 7-21-14. Metabolic and health consequences of heat stress: Knowledge gaps and opportunities. ASAS Animal Health Symposium. Kansas City, MO.
146. **Baumgard, L.H.**, 6-26-14. Dietary strategies to reduce the negative impact of heat stress on lactating dairy cows. International Congress on Bovine Medicine. IX annual symposium. Oviedo Spain.
145. **Baumgard, L.H.** 6-5-14. Review of nutrient partitioning. Cornell Dairy Short Course. Ithaca NY.
144. **Baumgard, L.H.** 6-4-14. Heat Stress: What's with the guts. Cornell Dairy Short Course. Ithaca NY.
143. **Baumgard, L.H.**, 4-15-14 Feeding and managing cows to minimize heat stress. Tri-State Dairy Nutrition Conference. Fort Wayne IN.
142. **Baumgard, L.H.** 3-31-14. A rationale evaluation of dietary fat and human disease. Nobles County Corn and Soybean Growers Annual Meeting. Worthington MN
141. **Baumgard, L.H.** 2-20-14. Heat Stress; What's the guts got to do with it? Southwest Nutrition Conference. Tempe AZ.
140. **Baumgard, L.H.** 12-17-13. Ambient temperature, metabolism and body composition. NIH-funded Nutrition Obesity Research Center (NORC) at the University of Alabama Birmingham. Birmingham AL.
139. **Baumgard, L.H.** 11-13-13. Effects of heat stress on production and metabolism in swine. 29th Annual North Carolina Swine Nutrition Conference. Research Triangle Park, NC.
138. **Baumgard, L.H.** 10-10-13. Heat stress alters energy metabolism during pre- and postnatal development. XXIII International Reunion on Production of Meat and Milk in Hot Climates. Mexicali, Mexico.
137. **Baumgard, L.H.** 9-18-13. Environmental heat stress and gut integrity. Minnesota Nutrition Conference. Prior Lake MN.
136. **Baumgard, L.H.** 6-27-13. Effects of heat stress on pig productivity and metabolism. Iowa Swine Day. Ames IA
135. **Baumgard, L.H.** 6-12-13. Heat stress: Practical lessons learned in 2011. Four-State Dairy Nutrition and Management Conference. Dubuque IA,
134. **Baumgard, L.H.** 5-16-13. Understanding the physiological response to heat stress in pigs. Shanghai Gentech Industries Group. Shanghai China.
133. **Baumgard, L.H.**, 5-13-13. Heat stress management. 3rd International Symposium on Dairy Cow Nutrition and Milk Quality. Beijing China.
132. **Baumgard, L.H.** 4-27-13. Heat stress mitigation strategies. Hi-Pro Feeds producer meeting. Albuquerque NM.
131. **Baumgard, L.H.**, 4-18-13. Summer induced-low milk fat: Is it the same as diet induced milk fat depression? Ontario Association of Bovine Practitioners. Guelph Canada
130. **Baumgard, L.H.** 4-18-13 The biology of heat stress and potential mitigation strategies to minimize its impact. Ontario Association of Bovine Practitioners. Guelph Canada
129. **Baumgard, L.H.** 2-15-13. The link between animal fats, heart disease and cancer. Iowa Meat Packer's Association. Ames IA.

128. **Baumgard, L.H.** 1-23-13. Heat stress: What's the guts got to do with it? Cargill Dairy Technology Summit. Rosemont, IL.
127. **Baumgard, L.H.** 11-10-12. A rational evaluation of dietary fat and disease: examining the connection between animal fat and human health. National Animal Interest Alliance annual meeting. Redondo Beach, CA.
126. **Baumgard, L.H.** 8-8-12. Nutritional strategies to mitigate the negative effects of heat stress. Annual AgroLeite conference. Castrol Brazil.
125. **Baumgard, L.H.** 7-17-12. Use of fat and other feed additives in heat-stressed cattle. ADSA Symposium: Meeting the Nutrient Requirements of Dairy Cattle During Heat Stress. Phoenix AZ.
124. **Baumgard, L.H.** 7-15-12. Heat stress and post-absorptive metabolic perturbations. ASN-ADSA-ASAS Preconference: Regulation of Nutritional Intake and Metabolism. Phoenix AZ
123. **Baumgard, L.H.** 4-4-12. The effects of heat stress on ruminant production, metabolism and health. 2nd International Symposium on Leite Integral. Belo Horizonte, Brazil
122. **Baumgard, L.H.** 3-29-12. A rational evaluation of dietary fat from animal origin and human disease. The 8th Annual Biosciences Conference. Worthington MN
121. **Baumgard, L.H.** 3-28-12. Effects of heat stress on metabolism and production in dairy cows. Provimi Technical Team. Ames IA
120. **Baumgard, L.H.** 3-26-12. Climate change and how it will affect production and metabolism of dairy cattle and pigs. Thank Tank on Agriculture. Ames IA.
119. **Baumgard, L.H.** 3-16-12. A Review of Nutrient Partitioning in Ruminants. 16th Annual Conference on New Approaches to Production and Reproduction of Cattle. Uberlandia, Brazil
118. **Baumgard, L.H.** 3-15-12. The Effects of Heat Stress on Ruminant Physiology, 16th Annual Conference on New Approaches to Production and Reproduction of Cattle. Uberlandia, Brazil
117. **Baumgard, L.H.** 3-9-12. Heat stress: Understanding the physiologic and metabolic cascade in swine. IV International Swine Seminar. (sponsored by Zinpro). Barcelona, Spain.
116. **Baumgard, L.H.** 12-7-11. Heat Stress: Understanding the physiologic and metabolic cascade in cattle and swine (& poultry). Zinpro Sales Meeting. St. Paul MN.
115. **Baumgard, L.H.** 10-18-11. Effects of heat stress on production and metabolism in ruminants. Huazhong Agricultural University. Ensminger Delegation, Wuhan China.
114. **Baumgard, L.H.** 10-16-11. Effects of heat stress on production and metabolism in ruminants. Chinese Academy of Agriculture Sciences. Ensminger Delegation. Beijing China.
113. **Baumgard, L.H.** 10-15-11. Integration of post-absorptive lipid and carbohydrate metabolism. Chinese Academy of Agriculture Sciences. Beijing China.
112. **Baumgard, L.H.** 9-9-11. Effects of heat stress on energetic metabolism in ruminants. Produccion Animal y Manejo de Pastizales. University of Chihuahua, Chihuahua, Mexico.
111. **Baumgard, L.H.** 9-7-11. Effects of heat stress on metabolism and production variables during lactation. Digal Dairy Conference. Delicias, Mexico.
110. **Baumgard, L.H.** 7-13-11. Optimizing production during heat stress: Nutrition and Management. Ruminant Nutrition Symposium: Modulation of metabolism through nutrition and management. American Society of Animal Science Annual Meeting. New Orleans LA.
109. **Baumgard, L.H.** 6-11-11. Heat stress and metabolic acidosis, understanding what happens to overheated lambs. Iowa Sheep and Wool Festival. Adel IA
108. **Baumgard, L.H.** 6-9-11. Potential nutritional strategies to mitigate the negative effects of heat stress. Four-State Dairy nutrition and Management Conference. Dubuque IA.
107. **Baumgard, L.H.** 5-7-11. A review of nutrient partitioning in dairy cattle: 2nd International Symposium on Dairy Cow Nutrition and Milk Quality. Beijing China

106. **Baumgard, L.H.** 5-4-11. Effects of heat stress on pig physiology and performance. The Hanor Co. Franklin KY.
105. **Baumgard, L.H.** 4-1-11. A review of nutrient partitioning. Iowa St. Univ., Dept. Anim. Sci. Physiol. Seminar.
104. **Baumgard, L.H.** 3-1-11. How a cow's body reacts to heat stress and strategies to minimize this impact. Elanco Animal Health. Wisconsin Dells, WI
103. **Baumgard, L.H.** 1-25-11. Effects of heat stress on nutrient partitioning. ISU. Dept. Anim. Sci. Meat Science Seminar.
102. **Baumgard, L.H.** 1-21-11. Nutritional and management decisions during heat stress. FormAFeed Dairy Conference. Redwood Falls, MN.
101. **Baumgard, L.H.** 1-17-11. The truth about animal products in our diets. Keynote speaker. Southeast Minnesota Ag Alliance. Rochester, MN
100. **Baumgard, L.H.** 10-6-10. A review of nutrient partitioning. Pacific Northwest Nutrition Conference. Vancouver, Canada
99. **Baumgard, L.H.** 9-20-10. The effects of heat stress on nutrient partitioning in dairy, beef and pigs. Dept Seminar. University of Minnesota, Department of Animal Science. St. Paul.
98. **Baumgard, L.H.** 9-15-10. The Animal Rights movement and human dietary myths. Keynote speaker. Iowa Poultry Association. Okoboji IA.
97. **Baumgard, L.H.** 9-8-10. Human dietary myths about dairy and other animal food production. Land O Lakes Technical Symposium. Alexandria MN.
96. **Baumgard, L.H.** 6-10-10. Interactions between heat stress and nutrition decisions. Nutreco Inc. Prague Czech Republic
95. **Baumgard, L.H.** 3-14-10. The truth about the healthfulness of dairy food products. Hubbard Feeds. Flandreau SD
94. **Baumgard, L.H.** 3-14-10. Getting ready for heat stress. Hubbard Feeds. Flandreau SD.
93. **Baumgard, L.H.** 3-13-10. Research Focus and update. Iowa Feed and Nutrition Seminar. Iowa State University.
92. **Baumgard, L.H.** 3-22-10. Re-evaluating the relationship between dietary fat and human disease. Think Tank on Animal Agriculture. Iowa State University.
91. **Baumgard, L.H.** 2-10-10. A rational evaluation of the dietary fat human health hypothesis. Dept. Food Sci. and Human Nutrition Seminar. Iowa State University.
90. **Baumgard, L.H.** 2-15-10. Human dietary myths about dairy and other animal food products. 18th Annual Carver County/U of M Dairy Expo & Trade Show. Norwood Young America MN.
89. **Baumgard, L.H.** and N. Upah. 2-15-10. Revisiting Rumensin's role in energy nutrition. 18th Annual Carver County/U of M Dairy Expo & Trade Show. Norwood Young America MN
88. **Baumgard, L.H.** 1-22-10. A rational evaluation between dietary fat and human disease. Dept. Anim. Sci. Seminar. Iowa State University.
87. **Baumgard, L.H.** and R.P. Rhoads, 11-3-09. The effects of heat stress on nutrient utilization. 2009 ADSA Discover Conference on Heat Stress. Nashville IN.
86. **Baumgard, L.H.**, R.P. Rhoads and U. Bernabucci. 11-3-09. The effects of heat stress on digestion. 2009 ADSA Discover Conference on Heat Stress. Nashville IN.
85. **Baumgard, L.H.** 10-29-09. The effects of heat stress on nutrient partitioning in lactating and growing cattle. University of Florida, Dept. Anim. Sci.: Distinguished Lecture Series.
84. **Baumgard, L.H.** 10-28-09. Is negative energy balance in early lactation really a bad thing? University of Florida, Dept. Anim. Sci.: Distinguished Lecture Series.

83. **Baumgard, L.H.** and R.P. Rhoads. 7-14-09. The effects of heat stress on post-absorptive metabolism. Foundation Scholar Lecture. American Dairy Science Association annual meeting. Montreal Canada.
82. **Baumgard, L.H.** and R.P. Rhoads. 5-6-09. The effects of heat stress on metabolism, energetics and production in growing and lactating cattle. 1st International Symposium on Dairy Cow Nutrition and Milk Quality. Beijing China.
81. **Baumgard, L.H.** and R.P. Rhoads. 4-30-09. The effects of heat stress on dairy cow nutrition decisions. For Balchem Inc. Tokyo Japan.
80. **Baumgard, L.H.,** R.J. Collier, and R.P. Rhoads. 3-13-09. The effects of heat stress on nutrition and management decisions. Western Dairy Management Conference. Reno, NV.
79. **L.H. Baumgard** and R.P. Rhoads. 11-20-08. Nutrient partitioning, energy metabolism and milk fat synthesis. Shur-Gain Nutrition. Stratford Canada
78. **L.H. Baumgard.** 11-19-08. Managing the transition cow and heat stress energetics. Shur-Gain Nutrition. Stratford Canada
77. **Baumgard, L.H.,** R.P. Rhoads and M.R. Waldron. 11-14-08. Effects of heat stress on endocrine regulation of metabolism. 6th International Congress on Farm Animal Endocrinology. Roanoke, Virginia USA.
76. **Baumgard, L.H.** 9-17-08. Effects of heat stress on energetic metabolism in dairy cattle and rodents. Department of Nutritional Sciences. University of Arizona.
75. **Baumgard, L.H.** 9-10-08. Heat stress and the dairy cow. Land O Lakes Purina Feed LLC. Gainesville FL.
74. **Baumgard, L.H.** 9-3-08. The effects of heat stress on lactating and growing ruminants and potential nutritional strategies. Land O Lakes Purina Feed LLC. Alexandria MN.
73. **Baumgard, L.H.** 8-16-08. The biology of heat stress and nutrition implications. Elanco Animal Health. Minneapolis Veterinary Meeting. Bloomington MN.
72. **Baumgard, L.H.** 8-12-08. The effects of heat stress and nutrition decisions. Advanced Dairy Nutrition and Management Conference. Cornell University. Ithaca NY.
71. **Baumgard, L.H.** 8-09-08. Diet and human disease? The role of the animal rights movement. National Animal Interest Alliance. Hartford CT.
70. **Baumgard, L.H.** 4-26-08. The effects of heat stress on metabolism in ruminants. Elanco Animal Health: Eastern Canada Dairy Veterinary Seminar. Quebec Canada.
69. **Baumgard, L.H.** 4-12-08. The effects of heat stress on metabolism in ruminants. Elanco Animal Health: Northwest Dairy Veterinary Seminar. Niagara on the Lake. Ontario Canada.
68. **Baumgard, L.H.** 3-11-08. The effects of heat stress on dairy management decisions. Professional Dairy Producers of Wisconsin. Madison WI.
67. **Baumgard, L.H.,** 1-29-08 The effects of heat stress on production, metabolism and energetics of lactating and growing cattle. Florida Ruminant Nutrition Symposium. Gainesville, FL.
66. **Baumgard, L.H.** 9-07-07. Conjugated linoleic acid and milk fat synthesis. Digal. University of Delicias. Mexico
65. **Baumgard, L.H.** 9-07-07. Transition period energetics. Digal. University of Delicias. Mexico.
64. **Baumgard, L.H.,** R.J. Collier and R.P. Rhoads. 8-4-07. The effects of heat stress on bioenergetics in lactating Holstein cows: Elanco Animal Health. Bloomington MN
63. **Baumgard, L.H.** and R.P. Rhoads. 8-2-07. The effects of heat stress on metabolism and immune function. Prince Agri Products Summit. Bloomington, MN.
62. **Baumgard, L.H.,** R.P. Rhoads and R.J. Collier. 7-16-07. The effects of heat stress on nutrition and post-absorptive metabolism in lactating dairy cows. Bucknell Nutrition Conference. Lewisburg PA.

61. **Baumgard, L.H.** 6-13-07. Facts and myths about the effects of milk fatty acids on human health.4-State Dairy Nutrition and Management Conference. Debuque IA.
60. **Baumgard, L.H.,** R.J. Collier and R.P. Rhoads. 6-13-07. The effects of heat stress on energy balance and metabolism. 4- State Dairy Nutrition and Management Conference. Debuque IA.
59. **Baumgard, L.H.** and R.P. Rhoads. 5-18-07. Management Strategies for improving reproductive performances of dairy cows under heat stress/hot climates. International Scientific Seminar: Reproduction in Lactating Dairy Cows: Tunis, Tunisia.
58. **Baumgard, L.H.** 5-18-07. Feeding strategies for the transition cow. International Scientific Seminar: Reproduction in Lactating Dairy Cows: Tunis, Tunisia.
57. **Baumgard, L.H.** and R.P. Rhoads 5-8-07. The effects of heat stress on metabolism in lactating dairy cattle. Cargill Animal Nutrition. Wausau WI.
56. **Baumgard, L.H.** and M.J. Vanbaale. 4-24-07. The effects of increased milking frequency in early lactation. ELANCO Animal Health. Aguascalientes, Mexico
55. **Baumgard, L.H.** and R.P. Rhoads. 4-24-07. The effects of heat stress on energetics in lactating cattle. ELANCO Animal Health. Aguascalientes, Mexico.
54. **Baumgard, L.H.,** G. Shwartz, J.K. Kay and M.L. Rhoads. 3-07-07. Does negative energy balance (NEBAL) limit milk synthesis in early lactation? Western Canadian Dairy Seminar; Advances in Dairy Technology. Red Deer, Alberta, Canada.
53. **Baumgard, L.H.** J.B. Wheelock, M.D. O'Brien, M.J. VanBaale, R.J. Collier, M.L. Rhoads and R.P. Rhoads 2-23-07 Effects of heat stress on post-absorptive metabolism and bioenergetics in lactating dairy cows. Southwest Nutrition and Management Conference. Tempe AZ.
52. **Baumgard, L.H.** J.B. Wheelock, M.D. O'Brien, M.J. VanBaale, R.J. Collier, M.L. Rhoads and R.P. Rhoads 1-26-07 Effects of heat stress on post-absorptive metabolism and bioenergetics in lactating dairy cows. Monsanto Dairy Round Table. Sioux Falls SD
51. **Baumgard, L.H.,** J.B. Wheelock, M.D. O'Brien, M.J. VanBaale, R.J. Collier, M.L. Rhoads, and R.P. Rhoads. 1-25-07 Effects of heat stress on post-absorptive metabolism and bioenergetics in lactating dairy cows. Form A Feed Inc. Professional Dairy Seminar, Morton MN
50. **Baumgard, L.H.** J.B. Wheelock, M.D. O'Brien, M.J. VanBaale, R.J. Collier, M.L. Rhoads and R.P. Rhoads 1-24-07 Effects of heat stress on post-absorptive metabolism and bioenergetics in lactating dairy cows. Monsanto Dairy Round Table. Rochester MN
49. **Baumgard, L.H.** J.B. Wheelock, M.O'Brien, M.J. VanBaale, R.J. Collier, M.L. Rhoads and R.P. Rhoads. Comfortable cows during hot weather will enhance farm profit. 1-24-07 Proc. Intermountain Nutr. Conf. Salt Lake UT
48. **Baumgard, L.H.** 1-17-07. A recent and unconventional evaluation of dietary fat on human disease. Dept. Nutri. Sci. Seminar Series.
47. **Baumgard, L.H.** and R.P. Rhoads. 10-31-06. Effects of heat stress on the energy status of lactating dairy cattle. Penn St. Nutr. Conf. Harrisburg PA,
46. **Baumgard, L.H.** J.W. Wheelock, M. VanBaale, M. Rhoads, R. Collier and R.P. 10-19-06. Rhoads. Effects of heat stress on bioenergetics and production in lactating dairy cattle. Monsanto Science Symposium. St. Louis, MO.
45. **Baumgard, L.H.,** J.W. Wheelock, G. Shwartz, M. O'Brien, M. Rhoads, M. VanBaale, R. Collier, and R. Rhoads. 10-10-06. Effects of heat stress on nutritional and management strategies. Ariz. Prod. Conf. Tempe AZ.
44. **Baumgard, L.H.** and R.P. Rhoads. 9-29-06. Effects of heat stress on post-absorptive metabolism in lactating dairy cows. ELANCO Animal Health. Monterey CA.
43. **Baumgard, L.H.** and R.P. Rhoads. 9-20-06. Environmental influence on metabolism of ruminants. Minnesota. Nutrition Conference, St. Paul Mn.

42. **Baumgard, L.H.**, 9-20-06. Dietary manipulation of the nutritional value of milk. Minnesota Nutrition Conference, St. Paul, MN
41. **L.H. Baumgard**. 8-29-06. Potential application for conjugated linoleic acid in early lactation. BASF. Ludwigshafen. Germany.
40. **L.H. Baumgard**. 8-28-06. Effects of conjugated linoleic acid during the transition period in lactating cows. BASF. Ludwigshafen. Germany
39. **L.H. Baumgard** 6-2-06. Effects of heat stress on rumen health and energetics in lactating dairy cows. Chr. Hansen Animal Health & Nutrition. Milwaukee WI.
38. **L.H. Baumgard** and S.H. Baker. 4-28-06. Effects of conjugated linoleic acid on lipid and protein metabolism in a mouse geriatric and cachexia Model. California State University of Fresno. Dept. of Biol., Physiol. Seminar Series.
37. **L.H. Baumgard** and R.J. Collier. High production, Posilac and cow safety. 4-25-06. Monsanto Pre-conference symposia. Tri-State Nutrition Conference, Fort Wayne IN.
36. **L.H. Baumgard** and R.P. Rhoads. 4-18-06. Effects of heat stress on post-absorptive metabolism in lactating dairy cows. Cornell University, Department of Animal Sciences, Metabolism Seminar series. Ithaca, NY
35. **L.H. Baumgard**. 4-13-06. Effects of heat stress on lactating dairy cattle and human dietary myths. U of A, CALS, Ag 100 Council. Tucson AZ.
34. **L.H. Baumgard**. 4-11-06. Effects of heat stress s on energetics of lactating dairy cattle. ELANCO Animal Health, Sales Training Session, Indianapolis, IN.
33. **L.H. Baumgard**. 3-15-06. Effects of heat stress s on energetics of lactating dairy cattle. ELANCO Animal Health, pre-conference symposia. High Plains Nutrition Conference. Albuquerque, NM.
32. **L.H. Baumgard**. 2-9-06. Effects of heat stress on energetics of lactating dairy cattle. ELANCO Animal Health. Greenfield, IN.
31. **L.H. Baumgard**. 12-1-05. Effects of CLA on lipid metabolism in lactating dairy cattle. ELANCO Animal Health. Greenfield, IN.
30. **L. H. Baumgard**. 7-7-05. Effects of specific CLA isomers on milk fat synthesis. AgResearch. Ruakura. New Zealand.
29. **L. H. Baumgard**. 7-5-05. Effects of specific CLA isomers on milk fat synthesis. ViaLactia Biosciences. Auckland, New Zealand
28. **L. H. Baumgard**. 7-1-05. Effects of dietary CLA on energy balance parameters in early lactation. Dexcel Inc., Hamilton New Zealand.
27. **L. H. Baumgard**. 6-21-05. *Key not speaker*: Mechanisms regulating milk fat synthesis: potential on-farm applications of basic science. New Zealand Society of Animal Production. Christchurch. New Zealand.
26. **L. H. Baumgard** 6-16-05. Biosynthesis of different conjugated linoleic acids. University of Melbourne, Melbourne Australia.
25. **L. H. Baumgard** 6-10-05. Biosynthesis of different conjugated linoleic acids. Department of Primary Industries. Kyabram, Australia
24. **L.H. Baumgard** 6-7-05. Biosynthesis of different conjugated linoleic acids. University of Seoul. South Korea.
23. **L.H. Baumgard**. 6-7-05. Effects of dietary CLA on energy balance parameters in early lactation. Agribrands Purina Korea, Inc. Seoul, South Korea
22. **L.H. Baumgard** 5-31-05. Effects of dietary CLA on energy balance parameters in early lactation. Irish Agriculture and Food Development Authority. Moorepark. Fermoy Ireland
21. **L.H. Baumgard**. 4-22-05. Dietary Fat, Facts and Myths. The Arizona State Cowbells, Inc. and the American Cattlewomen, Inc.. Tempe AZ.

20. **L.H. Baumgard** . 4-6-05. Mechanisms by which CLA regulate mammary lipid metabolism. Conjugated Linoleic Acid; Implications for Mammary Growth, Development and Function. FASEB, San Diego CA
19. **L.H. Baumgard**. 2-2-05. Effects of conjugated linoleic acid on glucose homeostasis and body composition in the Zucker Diabetic rat. Modern Views on Nutrition: Iowa St. University, Ames, IA.
18. **L.H. Baumgard**. 3-17-04. Nutritional benefits of conjugated linoleic acid. The University of Arizona, Beef Quality Assurance. Tucson, AZ
17. **L.H. Baumgard**, 7-7-03. Altering lipid metabolism in lactating dairy cattle. Cargill Animal Nutrition, Elk River, MN.
16. **L.H. Baumgard**, 10-14-02, Human dietary fat intake: facts, unknowns and myths. University of Arizona, Department of Animal Sciences Seminar.
15. **L.H. Baumgard**, 09-20-02. Effects of specific conjugated linoleic acid isomers on lipid metabolism. University of Arizona, Physiological Sciences Seminar.
14. **L.H. Baumgard**. 07-19-02. Effects of conjugated linoleic acid on mammary cancer. Harvard University. Dana Farber Cancer Institute. Cambridge MA.
13. **L.H. Baumgard**. 5-15-02. Conjugated linoleic acid isomers and mammary lipid metabolism. Perspectives on Conjugated Linoleic Acid Research, Current Status and Future Directions. National Institute of Health. Bethesda MA.
12. **L.H. Baumgard**. 02-04-02. Effects of genetic selection for milk yield on the somatotropic axis. University of Arizona. Department of Animal Sciences.
11. **L.H. Baumgard**. 01-23-02. Effects of specific conjugated linoleic acids (CLA) on lipid metabolism in lactating and growing animals. University of Arizona. Department of Nutritional Sciences.
10. **L.H. Baumgard**. 09-11-01. Effects of conjugated linoleic acids (CLA) on lipid metabolism in lactating dairy cows. Cornell University. Department of Animal Science.
9. **L.H. Baumgard**. 07-01. Potential of conjugated linoleic acid (CLA) to alter lipid metabolism in domestic farm animals. Alpharma, Animal Health Division. Fort Lee, New Jersey.
8. **L.H. Baumgard**. 06-01. Effects of *trans*-10, *cis*-12 conjugated linoleic acid (CLA) on milk fat synthesis. University of Arizona. Department of Animal Sciences Seminar.
7. **L.H. Baumgard**. 06-01. Biosynthesis of *cis*-9, *trans*-11 CLA and strategies to enhance CLA concentrations in milk fat. New Zealand Dairy Board. Palmerston North, New Zealand.
6. **L.H. Baumgard**. 06-01. Rumen production of *trans*-10, *cis*-12 CLA and milk fat depression. Dexcel Co. Hamilton, New Zealand.
5. **L.H. Baumgard**. 05-01. Effects of *trans*-10, *cis*-12 CLA on lipid metabolism during lactation and growth. Animal Agriculture Group. Monsanto, Chesterfield, MO.
4. **L.H. Baumgard** and D.E. Bauman. 02-01. Effects of *trans*-10, *cis*-12 CLA on lipid metabolism during lactation and growth. Pennsylvania State University. Department of Animal Science Seminars.
3. D.E. Bauman, B.A. Corl, **L.H. Baumgard** and J.M. Griinari. 01-01. Conjugated linoleic acid – Fact or Fad? University of Nottingham Feed Conference. Loughborough, England.
2. **L.H. Baumgard** and D.E. Bauman. 11-00. Functional Foods and Conjugated Linoleic Acids (CLA), commercial possibilities for both isomers. Agriculture and Food Systems 2000. Cornell University Extension. Agriculture and Food Systems In-Service.
1. **L.H. Baumgard**. 05-00. Review of *cis*-9, *trans*-11 and *trans*-10, *cis*-12 CLA. University of Minnesota, Department of Animal Science Seminars.

PROFESSIONAL AFFILIATIONS & ACTIVITIES

- American Dairy Science Association
 - 1995 - Member
 - 2019, 2020 Zoetis Physiology Award Committee
 - 2014-16 FASS- American Feed Industry Association New Frontiers in Animal Nutrition Award
 - 2013-17 Nutritional Professionals Inc. Applied Dairy Nutr., Awards committee (Chair 14, 15, 17)
 - 2013 Midwest Section Past-president
 - 2012 Midwest Section President
 - 2010-12 Foundation Scholar Award Committee (Chair 2010 & 2012)
 - 2011 Midwest Section Vice-President
 - 2010 Midwest Section Secretary
 - 2009 –10 Cargill Young Scientist Award Committee (Chair: 2010)
 - 2009 18th Discover Conference Organizing Committee
 - 2008 –09 Late-Breaking Abstract Selection Committee
 - 2008 –09 Lactation Biology Symposia Program Committee
 - 2004 –06 Cargill Young Scientist Award Committee (Chair: 2006)
 - 2003 - 06 Lactation Biology Symposia Program Committee (Chair: 2004 & 2005)
 - 2003 National Milk Producers Hoyt Award Committee
- American Society of Animal Science
 - 1995 - Member
 - 2013-16 Physiology Symposia Committee
 - 2011 Midwestern Section Young Extension Specialist Award Committee
 - 2007 -09 Lactation Biology Symposia Committee
 - 2007 Western Section Graduate Student Paper Competition
 - 2002 -04 Western Section Advisory and Coordinating Committee
- American Society for Nutrition
 - 2002 - Member
 - 2011 Judge of EAN-RIS graduate student poster competition
 - 2006 Co-Chair: Human Milk/Lactation Symposia Session
- National Academy of Sciences
 - 2017 Jamboree: Science Breakthroughs 2030. A strategy for food and agricultural research

SCHOLARSHIP: AWARDS & HONORS

American Dairy Science Association

- 2020 Journal of Dairy Science Highly Cited Manuscript Award
- 2018 Zoetis Physiology Award
- 2012 Nutritional Professionals Award for Applied Nutrition
- 2009 Foundation Scholar Award
- 2007 Cargill Animal Nutrition Young Scientist Award
- 2002 National Milk Producers R.M. Hoyt Memorial Award

American Society of Animal Science

- 2007 Western Section Young Scientist Award

American Society for Nutrition

- 2013 Mead Johnson Award

Gamma Sigma Delta (Honor Society of Agriculture)

- 2018 Research Award of Merit

Iowa State University

- 2015 Mid-Career Research Award

University of Minnesota, Department of Animal Science

- 1997 Outstanding M.S. Student

Ad-Hoc Reviewer for Scientific Journals

Animal
Animal Feed Science and Technology
Animal Genetics
Animal Production Science
Australian Journal of Experimental Agriculture
British Journal of Nutrition
Canadian Journal of Animal Science
Domestic Animal Endocrinology
Endocrine Connections
European Journal of Lipid Science and Technology
Experimental Biology and Medicine
Food Research
International Journal of Biometeorology
Italian Journal of Animal Science
Lipids
Livestock Science
Journal of Applied Research
Journal of Animal Science
Journal of Dairy Research
Journal of Dairy Science
Journal of Food Science
Journal of Nutrition
Journal of Nutritional Biochemistry
Journal of the Science of Food and Agriculture
PLOSone
Reproduction
Research in Veterinary Science
Small Ruminant Research
Scientific World Journal

Ad-Hoc Reviewer for Granting Agencies

2002 & 2005	USDA/NRI
2008 & 2012	National Science Foundation (NSF)
2004, 2005 & 2006, 2013	Binational Agriculture Research & Development (BARD) fund
2011	USDA Small business Innovation Research Program (SBIR)

Panel Member for Granting Agencies

2011 & 2012	Binational Agriculture Research & Development (BARD) fund
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Research (70% of Appointment)

RESEARCH GRANTS

Name of Principal Investigator shown in bold

Grants Received While on Faculty at Iowa State University

No.	Investigators	Title	Amount	Source	Year
43.	L. Baumgard	Effects of IntelliBond® Z (zinc hydroxychloride) on intestinal permeability, systemic inflammation, and metabolism in heat-stressed cows	\$144,249	Micronutrients	20-21
42.	J. Selsby, L. Baumgard, R. Rhoads, S. White.	Calcium regulation as a contributor to heat stress-mediated skeletal muscle dysfunction	\$500,000	USDA-AFRI	20-23
41.	J. Selsby, L. Baumgard, J. Ross, B. Ramirez, L. Schulz, N. Seroa, R. Rhoads, S. White	Basic and applied consequences of heat stress in barrows and gilts *Ranked #1	\$1,000,000	USDA-AFRI-IDEA	20-24
40.	L. Baumgard	Effects of fat-embedded calcium gluconate supplementation on inflammatory biomarkers and intestinal barrier function following 6 d of feed restriction	\$155,233	Micronutrients	20-22
39.	L. Baumgard	Effects of cashew nut shell extract (CNSE) on production and metabolism in transitioning dairy cows.	\$241,315	Idemitsu	19-21
38.	L. Baumgard	Evaluating effects of Zinc-Hydroxychloride on biomarkers of inflammation and intestinal integrity during 5 d of feed restriction	\$184,410	Micronutrients	18-20
37.	L. Baumgard, H. Ramirez	Technical evaluation part 3 – effects of dietary endomicrobial feed supplement on production efficiency in lactating dairy cows.	\$195,172	ASCUS Biosciences	18-20
36.	L. Baumgard	Technical Evaluation - Effects of Dietary Endomicrobial Feed Supplement on Production Efficiency in Lactating Dairy Cows	\$56,920	ASCUS Biosciences	18-20
35.	L. Baumgard	Effect of Agrado Plus supplementation to dairy cattle under heat stress		Novus International	

34.	L. Baumgard, R. Rhoads	Metabolic disrupting effects of endotoxin in lactating cows *Ranked #1	\$110,356 \$500,000	USDA/NIFA	18-20 18-20
33.	J. Selsby, L. Baumgard, R. Rhoads	Therapeutic approaches to heat stress: targeting mitochondria	\$497,000	USDA/NIFA	18-20
32.	L. Baumgard	Effects of dietary endomicrobial feed supplement on production efficiency in lactating dairy cows	\$131,444	ASCUS Biosciences	17-18
31.	L. Baumgard	Effects of NutriTek on Metabolism and Inflammation in Heat-Stressed Cows	\$87,818	Diamond V	17-18
30.	L. Baumgard	Effects of long acting glucagon on metabolism in transitioning dairy cows.	\$140,567	Elanco Animal Health	16-17
29.	J. Patience, L. Baumgard, N. Gabler, D. Beitz, S. Morris, J. Russell.	Training Graduate Students and Future Leaders in Animal Nutritional Physiology and Metabolism	\$262,500	USDA	16-19
28.	J. Ross, A. Keating, L. Baumgard	Advancing investigations in swine reproduction efficiency at Iowa State University.	\$100,000	Iowa Pork Producers Association.	15-16
27.	L. Baumgard	Evaluating how Chromium Propionate affects Energetic Homeostasis Following LPS Infusion in Lactating Dairy Cows	\$77,501	Kemin Industries Inc.	15-16
26.	M. Rothschild, K. Stalder, J.Ross, L. Baumgard, A. Keating	Examination of Genomic Markers Associated with Heat Stress in pigs	\$26,400	ISU/ Smithfield	14-15
25.	L. Baumgard	The effects of chromium on production and metabolism in heat-stressed finishing pigs.	\$71,363	Kemin Industries Inc.	14-15
24.	J. Patience, L. Baumgard	Maximizing the utilization of lower energy, higher fiber feedstuffs through more focused and effective use of xylanase.	\$72,811	Iowa Pork Producers	14-15
23.	L. Baumgard, J.Patience, J. Dekkers, N. Gabler, S. Lonergan	Effects of genetics and dietary fiber on production variables in response to repeated exposures to heat stress.	\$78,350	Iowa Pork Producers	14-15
22.	A. Keating, R. Ross, L. Baumgard	Investigating hyperinsulinemia and increased circulating lipopolysaccharide involvement in seasonal infertility	\$55,000	Iowa Pork Producers	14-15
21.	R. Ross, A.	Determining how plasma exosomes	\$31,954	Wise	14-17

	Keating, L. Baumgard	facilitate intercellular communications and regulate growth in pigs.		Burroughs Memorial Endowment	
20.	R. Ross, A. Keating, L. Baumgard	Understanding the biology of seasonal infertility to develop mitigation strategies for swine.	\$158,318	National Pork Board	13-14
19.	L. Baumgard	Characterizing feed restrictions impact on biomarkers of leaky gut	\$130,414	Elanco Animal Health	13-14
18.	L. Baumgard	Characterizing the temporal pattern of leaky gut biomarkers in healthy and ketotic cows during the transition period.	\$68,996	Elanco Animal Health	13-14
17.	J. Selsby, L. Baumgard, S. Lonergan, J. Ross, R. Rhoads	The effects of heat stress on porcine skeletal muscle.	\$499,996	USDA/AFRI	14-17
16.	J. Patience, L. Baumgard	Understanding the effects of increased fiber from corn origin on the supply of energy and nutrients to the pig	\$69,385	Iowa Pork Board	13-14
15.	L. Baumgard, J. Patience, K. Prusa	Impact of seasonal heat stress on fatty acid composition and pork fat quality	\$93,858	National Pork Board	13-14
14.	L. Baumgard	Does a compromised gut integrity influence metabolic and production variables in lactating Holstein cows?	\$102,075	Elanco Animal Health	12-14
13.	A. Keating, J. Ross, L. Baumgard	Investigating biological reasons for seasonal infertility	\$52,369	Iowa Pork Producers	12-13
12.	L. Baumgard, N. Gabler, J. Ross, J. Selsby, J. Patience, S. Lonergan, R. Rhoads, M. Lucy, T Safranski	*The physiological impact of heat stress on pig metabolism and performance *Ranked #1	\$2,498,118	USDA/AFRI	10-15
11.	L. Baumgard, N. Gabler	The effects of low-molecular weight whey proteins on intestinal integrity in heat-stressed pigs	\$35,934	Midwest Dairy Association	10-11
10.	L. Baumgard, D. Beitz, L. Timms, J. Shearer	The effects of dietary Zn on production, metabolism and milk quality in transitioning dairy cows	\$143,900	Zinpro Inc.	10-12
9.	N. Gabler, L. Baumgard, J. Ross, J. Patience	Understanding the interaction between mechanisms of intestinal mycotoxin and endotoxin transport with rearing environment on pig health	\$125,000	USDA Animal Health	10-14

8.	R. Rhoads, L. Baumgard, D. Spurlock	The effects of heat stress on lipid metabolism	\$350,000	USDA/AFRI	10-12
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Total \$ Funded as P.I. at Iowa State University (2009-present)					\$5,160,175
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Total \$ Funded as P.I or Co-PI at Iowa State University (2009-present)					\$9,048,726
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Grants Received Prior to Appointment at Iowa State University

No.	Investigators	Title	Amount	Source	Year
7.	R. Rhoads, L. Baumgard, M. Waldron	*The effects of heat stress on carbohydrate metabolism in lactating dairy cows *#1 Ranked grant	\$348,000	USDA/NRI	08-10
6.	L. Baumgard, R. Rhoads	The effects of monensin on glucose production and bioenergetics of heat-stressed and underfed cows.	\$66,000	Elanco Animal Health	07-08
5.	L. Baumgard, R. Rhoads.	Effects of heat stress on hepatic glucose synthesis and insulin sensitivity in heat-stressed lactating cows	\$111,200	Elanco Animal Health.	06-07
4.	R. Collier, L. Baumgard, R. Rhoads, M. VanBaale	Revaluating the temperature humidity index for dairy cattle	\$275,000	USDA/NRI	06-08
3.	L. Baumgard, M. VanBaale	Effects of Banamine on inflammation, pyrexia, and bioenergetic variables in post-parturient Holstein cows	\$44,071	Sherring Plough Inc	06-07
2.	R. Collier, L. Baumgard	The effects of serotonin on milk synthesis in lactating Holstein cows	\$40,135	Monsanto Inc.	05-06
1.	L. Baumgard, G. Duff, R. Allen, D. Goll	Improving efficiency and carcass characteristics in natural beef	\$65,478	Sunland Beef Company	04-05
Total \$ Funded as P.I. at The University of Arizona (2001 –2009)					\$286,749
Total \$ Funded as P.I. or Co-P.I. at The University of Arizona (2001-2009)					\$949,884

GIFTS TO BAUMGARD RESEARCH PROGRAM

Gifts Received While on Faculty at Iowa State University

No.	Company/Organization	Amount	Species	Year
31.	Zoetis LLC (w/Drs. Ross, Smitz-Esser, Keating, Greiner)	\$135,000	Pigs	2020
30.	Zoetis LLC	\$169,222	Dairy	2019
29.	Grain States Soya, Inc	\$49,000	Dairy	2018
28.	Grain States Soya, Inc	\$50,000	Dairy	2018
27.	Phileo Lesaffre Animal care	\$33,250	Pigs	2018
26.	Grain States Soya, Inc	\$50,000	Dairy	2017
25.	Zinpro	\$130,000	Dairy/swine	2017
24.	Phileo Lesaffre Animal care	\$33,250	Pigs	2016
23.	DPI Global	\$24,500	Pigs	2016
22.	Zinpro Inc.	\$6,000	Ruminant	2014
21.	Tech Mix	\$14,400	Ruminant	2013
20.	Zinpro Inc.	\$90,000	Dairy/Swine	2013
19.	Zinpro Inc.	\$20,000	Swine	2013
18.	Zinpro Inc.	\$93,000	Swine	2013
17.	Zinpro Inc.	\$20,000	Swine	2013
16.	Zinpro Inc.	\$20,000	Swine	2012
15.	Zinpro Inc.	\$84,000	Swine	2011
14.	Zinpro Inc	\$20,000	Dairy	2010
13.	Feed Sources LLC	\$11,500	Dairy	2010
12.	Zinpro Inc.	\$20,000	Dairy	2010
11.	Land O Lakes	\$30,000	Dairy	2010
10.	BASF	\$41,200	Dairy	2010
Total \$ Gifts while on Faculty at Iowa State University (2009-2019)		\$1,144,322		

GIFTS TO BAUMGARD RESEARCH PROGRAM

Gifts Received While on Faculty at The University of Arizona

No.	Company/Organization	Amount	Species	Year
9.	Balchem (R. Collier, and L. Baumgard)	\$52,000	Dairy	2009
8.	ADM	\$48,000	Dairy	2007
7.	BASF	\$12,000	Dairy	2006
6.	Balchem (R. Collier and L. Baumgard)	\$12,000	Dairy	2006
5.	Alltech	\$44,700	Dairy	2005
4.	BioZyme Inc.	\$82,500	Dairy	2005
3.	United Dairymen of Arizona (M. VanBaale and L. Baumgard)	\$219,717	Dairy	2004-08
2.	BioZyme Inc.	\$51,000	Dairy	2003
1.	Adventis, Inc.	\$12,000	Dairy	2002
Total \$ Gifts while on Faculty at The University of Arizona (2009-2012)		\$533,917		

TOTAL BAUMGARD RESEARCH FUNDING

Total Funding (Grants & Gifts) while on Faculty at Iowa State University	\$10,193,048
Total Funding (Grants & Gifts) while on Faculty at The University of Arizona	\$1,483,801
Total Funding during Baumgard's career (2001-2020)	\$11,676,849

Teaching (25% of Appointment)

Courses Taught- University of Arizona

Animal Science 334: “Principles of Animal Nutrition”. 3 credits. Fall, 2003, 2004, 2005, 2006, 2007, 2008. This class was orientated towards 3rd year undergraduates. Course goals were to develop an understanding and appreciation for the principles of nutrition and their application to diet formulation and best feeding practises. The course had 50-70 students enrolled. (*Responsibilities- 50% instructor with Dr. Schurg as the other co-instructor*).

Animal Science 399: “Undergraduate Independent Study” Summer 2006. Directed an Animal Science senior in each semester in an independent laboratory project in environmental physiology. (*Responsibilities- 100% Instructor*)

Animal Science 445/545: “Nutritional Physiology and Metabolism”. 3 credits. Fall of 2002, 2003, 2004, 2005, 2006, 2007, 2008. This class was aimed at Seniors and beginning graduate students and the course goals are to increase understanding of metabolism and metabolic regulation through integration of nutrition, biochemistry and physiology. The course had 10-15 students enrolled. (*Responsibilities- 100% Instructor*)

Animal Science 460/560: “Physiology of Lactation”. 3 credits. Spring 2003, 2004, 2005, 2006, 2007, 2008. This class was aimed at Seniors and beginning graduate students and the course goals are to increase understanding of metabolism and metabolic regulation of the mammary gland. The course had 10-15 students enrolled. (*Responsibilities- 100% Instructor*)

Animal Science 499: “Undergraduate Independent Study”. Spring and Fall 2006. Directed an Animal Science senior in each semester in an independent laboratory project in environmental physiology. (*Responsibilities- 100% Instructor*)

Animal Science 596/696: “Departmental Seminar”. 1 credit. Fall & Spring 2002, 2003, 2004, 2005 The course was the graduate level seminar class and the objectives were to familiarize graduate students with seminars and best practises. (*Responsibilities: 100% Instructor*).

Courses Taught- Iowa State University

Food Science and Human Nutrition 208X. 1-credit. Contemporary Issues in Food Science and Human Nutrition. Spring 2011, 2012 Guest Lecture on the myths association with dairy lipid and human diseases.

Animal Science 214. Domestic Animal Endocrinology. 3-credits. Fall 2010, Spring 2011, Fall 2011. Guest Lecture on Ruminant Nutrition

Animal Science 319. “Principles of Nutrition”. 3-credits, Fall 2012 to present. The course objectives are to develop an understanding of the principles of nutrition and their application to diet formulation and best feeding practises. Dr. Baumgard is teaching this class for the first time in the Fall of 2012 and is scheduled to teach the course every fall. The course has approximately 200 students and is required of all Animal Science undergraduates. *(Responsibilities- 100% Instructor)*

Animal Science 324X. “Food Processing for Companion Animals”. 3-credits, Fall 2011. The course covered food processing and nutrition for carnivorous companion animals and included meat processing and meat preservation for companion animal diets. Dr. Baumgard focused on general nutrition and specifically the nutrient requirements of dogs and cats. It was taught for the first time in the Fall of 2011 and it had 8 students. *(Responsibilities- 33% instructor with Dr. E. Lonergan as the other co-instructor).*

Animal Science 320. “Animal Feeds and Feeding”. 3-credits, Spring 2012 and 2013. The undergraduate-level course focused on advanced diet formulation and feeding recommendations. Evaluation also focused on alternate feeding programs and diets in the context of case studies. The course had approximately 20 students. *(Responsibilities- 50% instructor with Dr. J. Russell the other co-instructor).*

Animal Science 490. “Independent Study in Environmental Physiology”. Spring 2011, 2012. 3 credits. Directed an Animal Science senior in each semester in an independent laboratory project in environmental physiology. *(Responsibilities- 100% Instructor)*

Animal Science 501. Survey of Animal Disciplines. 1 credit. Fall 2011, 2012. Guest lecture on current events in Environmental Physiology.

Nutritional Science 507X “Biochemical and Physiological Basis of Nutrition”. 4-credits, Fall, 2010. This is a required course for all incoming graduate students into the Interdepartmental Graduate Nutrition Program (IGPNS). The course was markedly altered and the Fall of 2010 was the first time it was taught with the new format. Dr. Baumgard was responsible for teaching the carbohydrate digestion and post-absorptive metabolism sections. *(Responsibilities- 20% instructor with Dr. N. Gabler as the course coordinator).*

Animal Science 519-520. “Digestive Physiology and Metabolism of Ruminants” 3-credits, Spring 2010, 2012, 2014, 2016, 2018, 2020. This graduate-level course emphasis the digestive physiology and metabolism of ruminants and pre-ruminants. Dr. Baumgard’s sections concentrated on carbohydrate and lipid nutrition and metabolism with special emphasis on metabolic diseases. The course has had 8-10 students enrolled. *(Responsibilities- 33% instructor with Dr. Hansen and Dr. J. Russell the other co-instructors).*

Animal Science 603. “Seminar in Animal Nutrition” 1-credit, Fall, 2009, 2012. 2016. The course is the graduate level seminar class and the objectives are to familiarize graduate students with seminars and best practises for oral communication. *(Responsibilities: 50% Instructor with Dr. Beitz as the other co-instructor).*

Animal Science 620. “Advanced Nutrition: Metabolism”. 2-credits. Fall 2011, 2013, 2015, 2017, 2019. The graduate-level course focuses on energy constituents of feedstuffs and energy needs of animals as related to cellular biochemistry and physiology. Dr. Baumgard taught this course in the Fall of 2011 and is scheduled to teach it every other Fall from now on. The course has 8-10 students enrolled. *(Responsibilities- 100% Instructor)*

International Short Course: Animal Responses to environmental Stress: Universidad de Buenos Aires. Maestria en Produccion Animal. May 30th to June 2nd, 2016. 2 credits. Organized by Dr. Gustavo Jaurena. This

graduate-level course focused on all aspects of environmental physiology. Dr. Baumgard taught this course from 0900 h to 1700 h for four days.

International Short Course: Animal Responses to environmental Stress: Universidad de Buenos Aires. Maestria en Produccion Animal. March 5th to 7th, 2018. 2 credits. Organized by Dr. Gustavo Jaurena. This graduate-level course focused on all aspects of environmental physiology. Dr. Baumgard taught this course from 0900 h to 1730 h for three days.

International Short Course: Animal Responses to Environmental Stress: Graduate School of Global Food Resources, Hokkaido University. Hokkaido Japan. Spring semester: 2018, 2019 & 2020

SUPERVISION OF UNDERGRADUATE RESEARCH STUDENTS

Formal Supervision of Undergraduate Student Research Projects at Iowa State University: (Independent Study, Science with Practice, Honors Program and/or The McNair Program)

Student	Year	Post B.S. Placement
Javier Aguirre	2021	Still an undergraduate
Grace Jakes	2020	Still an undergraduate
Chloe Ryan	2019	U. of IL Vet school
Dillon Tartaglia	2019	U. of FL Vet school
Emily O'Meara	2019	Grad school at U of IL
Kayla Elmore	2019	Grad school at ISU
Sabrina Portner	2018	Franciscan Mission Service
Megan Abeyta	2017	Grad school at ISU
Brittany Tucker	2016	Unknown
Erika Edwards	2015	Grad school at U. of Tenn.
Erin Horst	2014	Grad school at ISU
Levi Long	2011	U. of MN Pharmacy School
Kelsey Cole	2011	Grad school at MO St. U.

Supervision of ISU Undergraduate Students Working on Research Projects in Baumgard Lab

Student	Year	Post B.S. Placement
Garett Onstot	2019	Grad school at UC Davis
Larissa Becker	2019	Grad school at KSU
Trent Westhoff	2018	Grad school at Cornell U
Charlotte Halley	2018	Grad school at ISU
Brooke Hamilton	2017	Grad school at ISU
Payton Duitscher	2017	ISU Vet school
Jacob Yarian	2017	Grad school at ISU
Brady Goetz	2017	Grad school at ISU
Julie Opgenorth	2016	Grad school at MSU
Anthony Kramer	2016	Grad school at ISU
Matt Garrick	2016	Grad School at TA&M
Will Crum	2015	ISU Vet school
Carrie Shouse	2015	Grad school at ISU
David Valko	2014	Grad school at U of WI
Chris Almond	2014	Grad school at U of Guelph
Wes Schweer	2012	Grad school at ISU
Nessa Moellers	2011	ISU Vet school
Nicole Walljasper	2010	ISU Vet school

SUPERVISION OF GRADUATE STUDENTS

Supervision of Graduate Students at Iowa State University

Graduate Students Advised or Co-Advised				
Student	Degree/ Date	Major	Role	Placement
Julie Opgenorth	Ph.D. 2023	Anim. Sci.	Advisor	
Alyssa Freestone	M.S. 2023	Anim. Sci.	Advisor	
Brady Goetz	Ph.D. 2023	Anim. Sci.	Advisor	
Megan Abeyta	Ph.D. 2023	Anim. Sci.	Advisor	
Sonia Rodriguez-Jimenez	Ph.D. 2022	Anim. Sci.	Advisor	
E. Johana Mayorga Lozano	Ph.D. 2021	Anim. Sci.	Advisor	
Erin Horst	Ph.D. 2020	Anim. Sci.	Advisor	Innovative Liquids
Mohammad al Qaisi	Ph.D. 2018	Anim. Sci.	Advisor	Faculty, U of Jordan
Carrie McCarthy	M.S. 2018	Anim. Sci.	Co-advisor	Micro-Nutrients
Mackenzie Dickson	M.S. 2017	Anim. Sci.	Co-advisor	PhD student U of FL.
Sara Kvidera	Ph.D. 2017	Nutr. Sci.	Advisor	Micro-Nutrients
E. Johana Mayorga Lozano	M.S. 2016	Anim. Sci.	Advisor	PhD student ISU
Jake Seibert	Ph.D. 2016	MCDB	Co-advisor	University of MN
Mohannad Abu Ajamieh	Ph.D. 2015	Anim. Sci.	Advisor	Faculty, U. Jordan
M. Victoria Sanz-Fernandez	Ph.D. 2014	Nutr. Sci.	Advisor	Trouw Nutrition
Jay Johnson	Ph.D. 2014	Nutr. Sci.	Advisor	USDA/ARS Purdue U
Amir Nayeri	M.S. 2012	Anim. Sci.	Advisor	Provimi/Cargill
Nathan Upah	M.S. 2011	Anim. Sci.	Advisor	TechMix, Stewart MN
Sarah Pearce	M.S. 2011	Nutr. Sci.	Advisor	USDA/ARS ISU

L.B. ISU Alumni:

Dr. Sarah Pearce:

Nathan Upah MS

Amir Nayeri MS

Dr. Jay Johnson

Dr. Sanz-Fernandez

Dr. Abu Ajamieh

Dr. Jake Seibert

Dr. Sara Kvidera

J.M. Lozano MS

Carrie McCarthy MS

M. Dickson MS

Dr. M. al Qaisi

Dr. Erin Horst

More Detailed Description of Current Position

Research Animal Physiologist at USDA ARS. Ames IA

R&D scientist for animal feed supplement company

R&D scientist for Cargill Animal Nutrition. OH

Research Animal Scientist USDA ARS. Lafayette IN.

Senior Ruminant Research Lead: Trouw Nutrition: Amersfoort, The Netherlands

Assoc. Professor and Asst. Dean for Student Affairs: U of Jordan, Amman

Post-Doc in Biochemistry at the U of Minnesota. Minneapolis

R&D scientist and physiology tech. support for Micronutrients. Indianapolis IN

PhD student in the Baumgard lab

Ruminant Business Manager. Micronutrients, Indianapolis IN

PhD student in Reproductive Physiology at the U of FL.

Asst. Professor of Nutr. Physiology at the U of Jordan. Amman

Technical Services Rep. for Innovative Liquids, El Dorado Hills, CA

Graduate Student POS Committees at Iowa State University

Student	Degree/Date	Major/Advisor
Tori Rudolph	Ph.D. Spring 2022	Animal Science/Josh Selsby
J. Wickramasinghe	Ph.D. Spring 2022	Animal Science/Ranga Appuhamy
Ananda Portela	Ph.D. Spring 2022	Animal Science (Cornell University)
Russell Pate	Ph.D. Spring 2020	Animal Science (University of Illinois)
Amy Petry	Ph.D. Fall 2020	Animal Science/John Patience
Logan Kilburn	M.S. Spring 2019	Animal Science/Mariana Sorea
Jordan Eder	Ph.D. Spring 2019	Vet Path/Randy Sackett
Emily Branstad	M.S. Spring 2019	Animal Science/Hugo Ramirez
Elizabeth Hines	Ph.D. Summer 2018	Animal Science/Jason Ross
Trey Kellner	Ph.D. Spring 2018	Animal Science/John Patience
Kaylee Rowland	Ph.D. Spring 2018	Genetics/Susan Lamont
Kaitlyn Holden	Ph.D. Spring 2018	Ecol., Evol., Org. Bio./ Anne Bronikowski
Ashley Thomas	M.S. Summer 2017	Animal Science/Hugo Ramirez
Matthew Romoser	M.S. Fall 2017	Animal Science/Jason Ross
Katlyn DeVoe	M.S. Spring 2017	Ag. Bio. Eng./
Eric Testroet	Ph.D. Spring 2017	Nutritional Sciences/Don Beitz
Rebecca Polich	Ph.D. Spring 2016	Ecol., Evol., Org. Bio./ Fred Janzen
Elizabeth Hines	Ph.D. Spring 2018	Animal Science/Jason Ross
Ahmad Al-Shabi	M.S. Spring 2016	Genetics/Aileen Keating
Olga Volodina	M.S. Spring 2016	Genetics/Josh Selsby
Eric Gangloff	Ph.D. Spring 2015	Ecol., Evol., Org. Bio./ Anne Bronikowski
Amanda Meyers	Ph.D. Spring 2015	Nutritional Sciences/John Patience
Pia Faylon	M.S. Spring 2015	Genetics/Diane Spurlock
Sarah Pearce	Ph.D. Spring 2014	Nutritional Sciences/Nick Gabler
Nestor Gutierrez	Ph.D. Fall 2013	Nutritional Sciences/John Patience
Raj Murugesan	Ph.D. Spring 2013	Nutritional Sciences/Mike Persia
Dan Kiesling	M.S. Fall 2012	Animal Science/Dan Morrill
Cassie Jones	Ph.D. Spring 2012	Nutritional Sciences/John Patience
Paul Vulcan	M.S. Spring 2012	Kinesiology/Rick Sharp
Kim Morrill	Ph.D. Spring 2011	Animal Science/Howard Tyler

Supervision of Graduate Students at The University of Arizona

Graduate Students Advised or Co-Advised			
Student	Degree/Date	Role	Placement
Sara Sanders	Ph.D. 2010	Co-Advisor	Mesa Community College
Michelle Skrzypek	M.S. 2009	Advisor	Family Farm
Laura Herdandez	Ph.D. 2008	Co-Advisor	Faculty at the U. Wisconsin
Morgan O'Brien	M.S. 2008	Advisor	Veterinary School
Gilad Schwartz	M.S. 2007	Advisor	Edward Jones
Jessica Wheelock	M.S. 2007	Advisor	Dairy Nutrition Services, Phoenix AZ
Shannon Baker	M.S. 2007	Advisor	PhD program Tufts University
Jane Kay	Ph.D. 2006	Advisor	Dairy NZ, Research Inst. Hamilton NZ
Rosemarie Burgos	M.S. 2006	Co-Advisor	Dairy Nutrition Services, Phoenix AZ
Laura Odens	M.S. 2006	Advisor	Hi-Pro Feeds, Clovis NM
Allison Fitzgerald	M.S. 2004	Co-Advisor	Monsanto, St. Louis MO
Octavio Mendivil	M.S. 2004	Advisor	Zinpro Inc.
Hank Hafliger III	M.S. 2004	Advisor	Dairy Producer
Chel Moore	Ph.D. 2004	Advisor	Kemin Inc.

<u>LB U of AZ Alumni:</u>	<u>More Detailed Description of Current Position</u>
Dr. Chel Moore:	R&D scientist for Kemin Inc. Des Moines IA
Hank Hafliger MS	Dairy farmer in Idaho (>10,000 cows)
Octavio Mendivil MS	Technical Sales for Zinpro Inc. in Western USA
Laura Odens MS	Technical Sales for HiPro Feeds in Western USA
Dr. Jane Kay	Scientist (Nutr. Phys.) for Dairy NZ. Hamilton NZ.
Allison Fitzgerald MS	Regulatory & Scientific Engagement Mgr. Bayer, St. Louis MO
Shannon Baker MS	Post-doc at the Harvard Stem Cell Institute, Cambridge MA
Rosemarie Burgos MS	Owner and Operator of Dairy Nutrition Services, Chandler AZ
Jessica Wheelock MS	Dairy Research Farm manager at U of WI. Madison
Gilad Schwartz MS	Financial Advisor at Edward Jones; Larkspur CO
Morgan Obrien MS	Ambulatory Veterinarian in Saratoga Springs NY
Laura Hernandez PhD	Assoc. Prof. in mammary biology at U of WI. Madison
Michelle Skrzypek MS	Family Farm in OH.
Dr. Sara Sanders	Faculty of Anatomy and Physiology. Mesa Community College, AZ

Graduate Student Committees at The University of Arizona

Student	Degree	Major/Advisor
Cami Cheatham	M.S.	Animal Science/Glenn Duff
Xiaochuan Chen	M.S.	Animal Science/Sean Limesand
Brent Pollard	M.S.	Animal Science/Robert Collier
Ming Chich Lai	M.S.	Animal Science/Ron Allen
Bonnie Jones	M.S.	Animal Science/ Roy Ax
Casey McMurphy	M.S.	Animal Science/Glenn Duff
Angie Bowen	M.S.	Animal Science/Roy Ax
Rosemarie Burgos	Ph.D.	Animal Science/Robert Collier
Rita Ibrahim	Ph.D.	Animal Science/John Marchello
Mary Ann Harris	Ph.D.	Animal Science/Mark Arns
Chad Steining	Ph.D.	Animal Science/Robert Collier
Erin Annen	Ph.D.	Animal Science/Robert Collier
Clay Bailey	Ph.D.	Animal Science/Glenn Duff
Heather Salazar	Ph.D.	Physiology/Adele Turzillo
Travis Whitney	Ph.D.	Animal Science/ Glenn Duff

Graduate Thesis Defence External Examiner

Student	Degree/Date	Institution/Advisor
A. Contreras-Jodar	Ph.D. Spring 2019	University of Barcelona/Dr. Geraldo Lopez
Ian Hutchinson	Ph.D. Fall 2011	University of College Dublin/Dr. S.T. Butler

Supervision of Post-Doctoral Fellows at Iowa State University

Student	Date	Comment
Dr. Rebecca Boddicker	Spring 2011 -2013	Co-Advised with Dr. Jason Ross

Hosting of Visiting Scholars

Scientist	Institution	Year	Time Frame
M. Francesca Caratzu	University of Sassari	2019	6 months
Silvia Carter	University of Sassari	2019	6 months
Lianne Van Den Brink	Utrecht University, Veterinary Medicine	2018	6 months
Dr. Yanxia Gao	Agriculture University of Hebei, China	2015	6 months
Dr. Fidan Krasniqi	University of Pristina, Kosovo	2012	3 months
Matteus Toledo	São Paulo State University, Brazil	2012	6 months
Dr. Ekin Sucu	Uludag University, Turkey	2010-11	2 years
Dr. Hiroya Kadokawa	Yamaguichi University, Japan	2011	1 month
Kristy DiGiacomo	The University of Melbourne, Australia	2009	5 months
Giovanni Gliatta	Universita di Foggia, Italy	2008	6 months

Baumgard Graduate Student (U of AZ and ISU) Awards:

Student	Year, Award
Octavio Mendivil	2002 Graduate College Minority Fellowship
Octavio Mendivil	2003 University of Arizona Hispanic Alumni Scholarship:
Jane Kay	2004 1 st place, ADSA graduate student paper competition
Jane Kay	2006 2 nd place McDiarmid New Zealand Young Scientist of the Year Award
Jessica Wheelock	2007 National Milk Producers Federation National Dairy Leadership Scholarship
M. Sanz-Fernandez	2010-12, Fulbright Scholarship from Spain (100% stipend while at ISU)
M. AbuAjamieh	2012 University of Jordan Scholarship (100% stipend while at ISU)
Jay Johnson	2012 1 st place at N. Borlaug Lectureship Poster Competition
Jay Johnson	2014 Department of Animal Sciences Graduate Student Excellence Award
Jay Johnson*	2014 Graduate College Research Excellence Award (Summer semester)
M. Sanz-Fernandez*	2014 Graduate College Research Excellence Award (Spring semester)
M. Sanz-Fernandez†	2014 Midwest ASAS Young Scholar Award
M. Sanz-Fernandez	2014 Thomas Sutherland graduate Excellence Award
Jake Seibert	2015 Arthur and Muriel Anderson Scholarship
Jake Seibert	2015 Print and grace Powers Hudson Scholarship
Sara Kvidera	2015 Land O Lakes John Brandt Memorial Scholarship
Sara Kvidera	2016 D. R. Griffith Research Excellence Award
Sara Kvidera*	2016 Iowa State University Graduate Research Excellence Award
Sara Kvidera†	2017 Midwest ADSA Young Scholar Award
Sara Kvidera	2017 Honorable Mention Zafarano Award
Sara Kvidera‡	2017 ADSA National Milk Producers Federation Richard M. Hoyt Award
Erin Horst	2017 Land O Lakes John Brandt Memorial Scholarship
Erin Horst	2018 Harold L. and Esther G. Wilcke Scholarship
Erin Horst	2018 Print and Grace Powers Hudson Scholarship
Johana Mayorga	2018 Arthur and Muriel Anderson Scholarship
Jake Seibert	2018 Graduate and Professional Student Senate Research Award
Mohammad Al-Qaisi†	2019 Midwest ADSA Young Scholar Award
Erin Horst	2019 Thomas Sutherland Graduate Award for Excellence
Johana Mayorga	2019 Harold L. and Esther G. Wilcke Scholarship
Erin Horst*	2019 Iowa State University Graduate Research Excellence Award
Erin Horst†	2020 Midwest ADSA Young Scholar Award
Johana Mayorga†	2020 Midwest ASAS Young Scholar Award
Johana Mayorga	2020 Grace Powers Hudson Scholarship
Johana Mayorga	2020 Thomas Sutherland Graduate Award for Excellence
Johana Mayorga*	2020 Iowa State University Graduate Research Excellence Award
Sonia Rodriguez Jimenez	2020 Harold L. and Esther G. Wilcke Scholarship
Erin Horst‡	2020 ADSA National Milk Producers Federation Richard M. Hoyt Award

* Recognizes ISU graduate students for outstanding research accomplishments as documented in their theses and dissertations. In the last 8 years, Baumgard's students have won this award 4 times.

† Recognizes and features the research accomplishments of recent Ph.D. graduates or current Ph.D. students in the advanced stages of their program. In the last 8 years, Baumgard's students have won this award 5 times

‡ Recognizes the most outstanding PhD student in ADSA whose research efforts have direct application to the problems of the US dairy industry. In the last 4 years, Baumgard's students have won this award 2 times.

Institutional Service

Service at Iowa State University

Departmental Level

- 2009 - 2016 Member, AnS Graduate Curriculum Committee
- 2009 - Member, AnS Chuckwagon/Graduate Breakfast Committee
- 2009 - Member, AnS Farm User Committee
- 2010 Member, Review of Animal Science Graduate Major Committee
- 2010-12 Chair of Dairy Users Group
- 2011 Member, P&T review committee for N. Gabler's 3 year review
- 2011- Supervisor for 3rd floor laboratory manager
- 2012 Member, P&T review committee for M. Persia's 3 year review
- 2012 Chair, Dr. George Fahey Dept. Collaborator Status committee
- 2012 Kildee hall space/desk committee
- 2013 Member of Dr. Mark Mogler Collaborator Status committee
- 2013 Social committee member
- 2013-14 Department Head Search committee
- 2014-15 Ast. Prof. Dairy Extension Search committee (chair)
- 2014 Dairy Farm feeder position committee
- 2015- Member, Seminar committee
- 2016 Member, Social/Communications Committee
- 2016 Member, Electronic Teaching Materials, facilities and equipment committee
- 2016 Asst. Prof. Basic Ruminant Nutrition Search committee (chair)
- 2016 Asst. Prof. Dairy Genetics search committee
- 2018 Kurt Youngs post P&T review committee
- 2019 Hugo Ramirez 3rd year PEC review committee (chair)
- 2020 Ranga Appuhamy 3rd review PEC review committee (chair)
- 2020 James Koltes 3rd year PEC committee member
- 2020-21 Asst. Prof. Dairy Teaching search committee (chair)

College Level

- 2009 Member, Nutritional Sciences Council
- 2010 Member, Agriculture Technology and Business Committee
- 2011 Member, IGPNS Grad Curriculum Committee
- 2011 Member, IGPNS Advisory Committee
- 2010-12 Chair, Martin Fund Selection Committee
- 2012-13 Dr. Steve Nissen Symposia Committee
- 2015 CALS USDA grant tips and suggestions panel member
- 2019 EEOB Asst. Prof. Comparative Animal Physiology search committee

University Level

- 2013 Keck Research Proposal Review Committee
- 2020 Mid-Career Research Award committee member

Service at The University of Arizona

Departmental Level

- 2001 - 09 Member, Graduate Curriculum Committee
- 2001 – 05 Member, Beef Steering Committee
- 2001 – 09 Member, Dairy Steering Committee
- 2002 Member, Animal Geneticists Faculty Search Committee
- 2002, 04, 06 Chair, Agriculture Research Complex Scientist Search Committee
- 2002 & 05 Member, Reviewer of Hatch Proposals Committee
- 2002 & 06 Member, Dairy Faculty Extension Search Committee
- 2003- 09 Member, Agriculture Research Complex Committee
- 2005 – 09 Supervisor: Graduate Student Organization
- 2006 – 09 Member, Campus Ag Center Improvements Committee
- 2006 - 09 Director of Graduate Studies

College Level

- 2002-09 Member, Graduate Programs Improvement Steering Committee 1
- 2003-09 Member, Outstanding Senior/GTA Selection Committee
- 2005 Member, All College/Cooperative Extension Faculty Conference Planning Committee

University Level

- 2002-05 Advisor: U of A Circle K Club (Kiwanis Student Organization)
- 2003-09 Member, International Animal Care and Use Committee (IACUC)
- 2003-09 Member, Animal Research Task Force Committee
- 2005-09 Member, Honors College