

**Felipe (Phil) Cardoso**

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**Abbreviated Curriculum Vitae**

**May 2, 2017**

**Educational Background**

D.V.M.	Universidade Federal do Rio Grande do Sul (UFRGS) – Brazil. College of Veterinary Medicine, December 9, 2001.
M.S.	Universidade Federal do Rio Grande do Sul (UFRGS) – Brazil. Major: Surgery and Biochemistry of Ruminants. College of Veterinary Medicine, January 7, 2007.
Ph.D.	University of Illinois, August 6, 2012. Major: Animal Sciences (Ruminant Nutrition).

**List of Academic Positions since Final Degree**

Assistant Professor, Department of Animal Sciences, University of Illinois, 2012 to present.

**Other Professional Employment**

SerVet, Inc. – Dairy Cattle Services – Brazil.

Dates: December 10, 2001 to May 14, 2007.

Title: Founder and President.

Location: Passo Fundo, RS – Brazil.

University of Sao Paulo (Escola Superior de Agricultura Luiz de Queiroz – ESALQ) – Brazil.

Dates: May 15, 2007 to January 15, 2009.

Title: Research Associate.

Location: Piracicaba, SP – Brazil.

**Honors, Recognitions, and Outstanding Achievements**

1. 2010 NMPF – National Dairy Leadership Scholarship.
2. 2010 American Dairy Science Association (ADSA) Award, 3<sup>rd</sup> place. Land O'Lakes, Purina Feed LLC Graduate Student Poster Contest – Ph.D. Division.
3. 2011 BASF Graduate Travel Award. The Department of Animal Sciences at the University of Illinois recognizes individual with significant research to service the dairy industry.
4. 2012 Gamma Sigma Delta, Honor Society of Agriculture
5. 2012 Graduate College Fellowship Award, University of Illinois.
6. 2012 ASN-ASAS-ADSA Pre-Conference, Regulation of Nutritional Intake and Metabolism Award, 2<sup>nd</sup> place. Graduate Student Poster Contest – PhD Division.
7. 2016 College Faculty Award for Excellence in Extension, University of Illinois.
8. 2016 ADSA Foundation Scholar Award in Dairy Production.
9. 2017 ADSA/ASAS Midwest Outstanding Young Extension Specialist Award.
10. 2017 NACTA (North American Colleges and Teachers of Agriculture) Educator Award.

Named to the List of Teachers Ranked Excellent by their Students: Fall 2012 (ANSC 100), Spring 2013 (ANSC 100, 398), Fall 2013 (ANSC 100), Spring 2014 (ANSC 100), Fall 2014 (100, 400, 522), Spring 2015 (ANSC 590), Fall 2015 (ANSC 100, 201), Spring 2016 (ANSC 100), and Fall 2016 (ANSC 100, 400).

**Offices Held in Professional Societies**

1. Secretary, American Dairy Science Association-Midwest section board of directors (*elected*, 2015).
2. President, American Dairy Science Association-Midwest section board of directors (*elected*, 2016-2017).
3. Member of the Journal of Dairy Science Management Committee (*elected*, 2017-2021).

**PUBLICATIONS AND CREATIVE WORKS**

# Denotes any publication derived from the candidate's thesis.

\* Denotes publication that has undergone stringent editorial review by peers.

+ Denotes publication that was invited and carries special prestige and recognition.

Δ Denotes publication that was authored by a graduate student advised by Dr. Cardoso

^ Denotes publication where Dr. Cardoso is the corresponding author

Names of student and post-doc authors advised by the candidate are underlined.

**Doctoral thesis title**

Relationships among nutritional regimen, metabolic disorders, reproduction, and production in dairy cows during the transition period.

**Chapters in Books (in print or accepted)**

C. C. Kalebich, and **F.C. Cardoso**. (2016) Effects of direct-fed microbials (DFM) on feed intake, milk yield, milk composition, feed conversion, and health condition of dairy cows. Book: Nutrients in Milk and Their Implications on Health and Disease. Ed. Elsevier. *In press*.

**Articles in Journals (in print or accepted)**

- \* 1) Renard, G, J.F. Garcia, **F.C. Cardoso**, M.F. Richter, J.A. Sakanari, L.S. Ozaki, C. Termignoni, A Masuda. (2000). Cloning and functional expression of a *Boophilus microplus* cathepsin L-like enzyme. Insect Biochemistry and Molecular Biology. 30:1017-1026.
- \* 2) Renard, G., F.A. Lara, **F.C. Cardoso**, M.D. Petretski, C. Termignoni, A. Masuda. (2002). Expression and Immunolocalization of a *Boophilus microplus* cathepsin L-like enzyme. Insect Molecular Biology. 11(4):325-328.
- \* 3) Da Silva, I.V, S. Imamura, C. Nakajima, **F.C. Cardoso**, C.A.S. Ferreira, G. Renard, A. Masuda, K. Ohashi, M. Onuma. (2005). Molecular cloning and sequence analysis of cDNAs encoding for *Boophilus microplus*, *Haemaphysalis longicornis* and *Rhipicephalus appendiculatus* actins. Veterinary Parasitology. 127(2):147-155.
- \* 4) Campos, R., F.H.D. González, A. Coldebella, **F.C. Cardoso**. (2006). Ruminal environment indicators and its relationships with milk composition and somatic cell counts during different stages of the beginning of lactation of high producing cows. Ciência Rural. 36(2):525-530.
- # \* 5) **Cardoso, F.C.**, V.S. Esteves, S.T. Oliveira, C. Lasta, S.F. Valle, R. Campos, F.H.D. González. (2008). Hematological, biochemical and ruminal parameters for diagnosis of left displacement of the abomasum in dairy cows from Southern Brazil. Pesquisa Agropecuária Brasileira. 43:141-147.
- \* 6) Garcia, A.M.B., **F.C. Cardoso**, R. Campos, D.X. Thedy, F.H.D. Gonzalez. (2011). Metabolic evaluation of dairy cows subjected to different strategies for preventing negative energy balance early postpartum. Pesquisa Veterinária Brasileira. 31(1):11-17.
- \* 7) **Cardoso, F.C.**, W. Sears, S.J. Leblanc, J.K. Drackley. (2011). Comparison of 3 methods for analyzing areas under the curve for glucose and nonesterified fatty acids concentrations following epinephrine challenge in dairy cows. Journal of Dairy Science. 94:6111-6115.

- # \* 8) **Cardoso, F.C.**, S.J. Leblanc, M.R. Murphy, J.K. Drackley. (2013). Parturition nutritional strategy affects reproductive performance in dairy cows. *Journal of Dairy Science*. 96:5859-5871.
- \* 9) Akbar, H., **F.C. Cardoso**, S. Meier, C. Burke, S. McDougall, M. Mitchell, C. Walker, S. L. Rodriguez-Zas, R.E. Everts, H.A. Lewin, J.R. Roche, J.J. Looor. (2014). Postpartal Subclinical Endometritis Alters Transcriptome Profiles in Liver and Adipose Tissue of Dairy Cows. *Bioinformatics and Biology Insights*. 8:45-63.
- \* 10) Khan, M.J., C.B. Jacometo, D.E. Graugnard, M.N. Corrêa, E. Schmitt, **F.C. Cardoso**, J.J. Looor. (2014). Overfeeding Dairy Cattle during Late-pregnancy Alters Hepatic PPAR $\alpha$ -regulated Pathways Including Hepatokines: Impact on Metabolism and Peripheral Insulin Sensitivity. *Gene Regulation and Systems Biology*. 8:97-111.
- + \* 11) Drackley, J.K. and **F.C. Cardoso**. (2014). Parturition and postpartum nutritional management to optimize fertility in high-yielding dairy cows in confined TMR systems. *Animal*. 8(supplement1):5-14.
- \* 12) Akbar, H., T.M. Grala, M. Vailati Riboni, **F.C. Cardoso**, G. Verkerk, J. McGowan, K. Macdonald, J. Webster, K. Schultz, S. Meier, L. Matthews, J.R. Roche, J.J. Looor. (2015). Body condition score at calving affects systemic and hepatic transcriptome indicators of inflammation and nutrient metabolism in grazing dairy cows. *Journal of Dairy Science*. 98:1019-1032.
- \* 13) Jahani-Moghaddam, M., E. Mahjoubi, M. Hossein Yazdi, **F.C. Cardoso**, J.K. Drackley. (2015). Effects of alfalfa hay and its physical form (chopped vs. Pelleted) on performance of Holstein calves. *Journal of Dairy Science*. 98:4055-61.
- \*  $\Delta$  ^ 14) Pineda, A. and **F.C. Cardoso**. (2015). Effects of rumen-protected choline with calcium salts of long chain fatty acids on milk yield and milk composition of middle and late lactation Holstein cows. *Livestock Science*. 175:47-58.
- \* #  $\Delta$  ^ 15) Barrera, A. G., N. Angeli, L. Machado, **F.C. Cardoso**, F. Gonzalez. (2015). Relationships between heat stress and metabolic and milk parameters in dairy cows in southern Brazil. *Tropical Animal Health Production*. 47(5):889-94.
- \*  $\Delta$  16) Zhou, Z., D.P. Bu, M. Vailati Riboni, M.J. Khan, D.E. Graugnard, J. Luo, **F.C. Cardoso**, J.J. Looor. (2015). Parturition dietary energy level affects periparturition bovine blood neutrophil metabolic, antioxidant, and inflammatory gene expression. *Journal of Dairy Science*. 98:5492-5505.
- \*  $\Delta$  17) Minuti, A, Z. Zhou, D.E. Graugnard, S.L. Rodriguez-Zas, A.R. Palladino, **F.C. Cardoso**, E. Trevisi, and J.J. Looor. (2015). Acute mammary and liver transcriptome responses after an intramammary *Escherichia coli* lipopolysaccharide challenge in postparturition dairy cows. *Physiological Reports*. 3:1-12.
- \* #  $\Delta$  ^ 18) Meteer, W.C., D.W. Shike, and **F.C. Cardoso**. (2015). Review: Parturition and Postparturition Nutritional Management to Optimize Fertility in Beef Cattle. *Acta Scientiae Veterinariae*. 43:1-18.
- \* #  $\Delta$  ^ 19) Luan, S., M. Duersteler, E.A. Galbraith, **F.C. Cardoso**. (2015). Effects of direct-fed *Bacillus pumilus* 8G-134 on feed intake, milk yield, milk composition, feed conversion, and health condition of pre- and postparturition Holstein cows. *Journal of Dairy Science*. 98:6423-6432.
- \*  $\Delta$  20) Minuti, A., A. Palladino, S. Alqarni, A. Agrawal, F. Piccioli-Capelli, F. Hidalgo, **F.C. Cardoso**, E. Trevisi, J.J. Looor. (2015). Abundance of ruminal bacteria, epithelial gene expression, and systemic biomarkers of metabolism and inflammation are altered during the periparturition period in dairy cows. *Journal of Dairy Science*. 98:8940-8951.
- \* #  $\Delta$  ^ 21) Haerr, K.J., N.M. Lopes, M.N. Pereira, G.M. Fellows, **F.C. Cardoso**. (2015). Corn silage from corn treated with foliar fungicide and performance of Holstein cows. *Journal of Dairy Science*. 98:8962-8972.

- \* # Δ ^ 22) Pineda, A. and **F.C. Cardoso.** (2015). Validation of a hand-held meter for measuring β-hydroxybutyrate concentrations in plasma and serum from dairy cows. *Journal of Dairy Science.* 98:8818-8824.
- \* Δ 23) Gonçalves, R.S., F.C. Cardoso, F. Guagnini, L.J.R. Catañeda, F. Gonzalez. (2015). Administration of early post-partum oral Drench in dairy cows: effect on metabolic profile. *Revista Medicina Veterinaria Zootecnia.* 62(3):10-17.
- \* 24) Osorio, J.S., C.B. Jacometo, D. Luchini, **F.C. Cardoso,** J.J. Loor. (2016). Hepatic global DNA and PPARα promoter methylation are altered in periparturient dairy cows fed rumen-protected methionine. *Journal of Dairy Science.* 99:23-44.
- \* # Δ ^ 25) Luan, S., K. Cowles, M.R. Murphy, **F.C. Cardoso.** (2016). Effect of a grain challenge on ruminal, urine, and fecal pH, apparent total-tract starch digestibility, and milk composition of Holstein and Jersey cows. *Journal of Dairy Science.* 99:2190-2200.
- \* # Δ ^ 26) Acosta, D.A.V., A.C. Denicol, P. Tribulo, M.I. Rivelli, C. Skenandore, Z. Zhou, D. Luchini, M.N. Corrêa, P.J. Hansen, **F.C. Cardoso.** (2016). Effects of rumen-protected methionine and choline supplementation on the preimplantation embryo in Holstein cows. *Theriogenology.* 85:1669-1679.
- \* # Δ ^ 27) Pineda, A., J.K. Drackley, J. Garrett, and **F.C. Cardoso.** (2016). Effects of rumen-protected niacin on milk production and body temperature of middle and late lactation Holstein cows. *Livestock Science.* 187:16-23.
- \* Δ 28) McCann, J.C., S. Luan, **F.C. Cardoso,** H. Derakhshani, E. Khafipour, and J.J. Loor. (2016). Induction of subacute ruminal acidosis affects the ruminal microbiome and epithelium. *Frontiers in Microbiology.* May (7); Article 701:1-18.
- \* Δ 29) Meteer, W.C., T.B. Wilson, D.H. Keisler, **F.C. Cardoso,** and D.W. Shike. (2016). Effects of prepartum plane of nutrition during mid- or late gestation on beef cow body weight, body condition score, blood hormone concentrations, and preimplantation embryo. *Italian Journal of Animal Science.* 15(2):264-274.
- \* # Δ ^ 30) Sulzberger, S., C.C. Kalebich, S. Melnichenko, and **F.C. Cardoso.** (2016). Effects of clay after a grain challenge on ruminal, blood, and fecal pH, and milk composition of Holstein cows. *Journal of Dairy Science.* 99: 8028-8040.
- \* 31) Zhou, Z., O. Bulgari, M. Vailati-Riboni, E. Trevisi, M.A. Ballou, **F.C. Cardoso,** D. Luchini, and J.J. Loor. (2016). Rumen-protected methionine compared with rumen-protected choline improves immunometabolic status in dairy cows during the periparturient period. *Journal of Dairy Science.* 99:8956-8969.
- \* # Δ 32) Pineda, A., M.A. Ballou, J.M. Campbell, **F.C. Cardoso,** and J.K. Drackley. (2016). Evaluation of serum protein-based arrival formula and serum protein supplement (Gammulin) on growth, morbidity, and mortality of stressed (transport and cold) male dairy calves. *Journal of Dairy Science.* 99:9027-9039.
- \* ^ 33) Ruiz-Rodriguez, C.T., J.R. Brandt, R. Oliveiro, Y. Ishida, N. Guedj, E.F. Garrett, G.K. Bar-Gal, N. Nikolaidis, **F.C. Cardoso,** and A.L. Roca. (2016). Polymorphisms of the Toll-like receptor 2 of goats (*Capra hircus*) may be associated with somatic cell count in milk. *Animal Biotechnology.* Published online: 28 Oct 2016. Pages 1-8.  
<http://dx.doi.org/10.1080/10495398.2016.1232267>
- \* # Δ ^ 34) Haerr, K.J., A. Pineda, N.M. Lopes, J.D. Weems, C.A. Bradley, M.N. Pereira, M.R. Murphy, G.M. Fellows, **F.C. Cardoso.** (2016). Effects of corn treated with foliar fungicide on in situ corn silage degradability in Holstein cows. *Animal Feed Science and Technology.* 222:149-157.
- \* # Δ ^ 35) Sulzberger, S., S. Melnichenko, and **F.C. Cardoso.** (2017). Effects of clay after an aflatoxin challenge on aflatoxin clearance, milk production, and metabolism of Holstein cows. *Journal of Dairy Science.* 100:1856-1869.

- \* 36) Derakhshani, H, H.M. Tun, **F.C. Cardoso**, J.C. Plaizier, E. Khafipour, and J.J. Loor. (2017). Linking periparturient dynamics of rumen microbiota to dietary changes and production parameters. *Frontiers in Microbiology*. 12 January. <https://doi.org/10.3389/fmicb.2016.02143>.
- \* # Δ ^ 37) Kalebich, C.C., M.E. Weatherly, K.N. Robinson, G.M. Fellows, M.R. Murphy, and **F.C. Cardoso**. (2017). Foliar fungicide (pyraclostrobin) application effects on plant composition of a silage variety corn. *Animal Feed Science and Technology*. 225:38-53.
- \* # Δ ^ 38) C.S. Skenandore, A. Pineda, J.M. Bahr, A.E. Newell-Fugate, and **F.C. Cardoso**. (2017). Evaluation of a commercially available radioimmunoassay and enzyme immunoassay for the analysis of progesterone and estradiol and the comparison of two extraction efficiency methods. *Domestic Animal Endocrinology*. 60:61-66.
- \* # Δ ^ 39) Acosta, D.A., M.I. Rivelli, C. Skenandore, Z. Zhou, D.H. Keisler, D. Luchini, M.N. Corrêa, and **F.C. Cardoso**. (2017). Effects of rumen-protected methionine and choline supplementation on steroidogenic potential of the first postpartum dominant follicle and expression of immune mediators in Holstein cows. *Theriogenology*. *In Press*.
- \* # Δ ^ 40) Rivelli, M.I., S.Y. Morrison, K.J. Haerr, S. Rodriguez-Zas, and **F.C. Cardoso**. (2017). Nutrition, reproduction, and young stock performance in dairy farms throughout Illinois: a Dairy Focus Team approach. *The Professional Animal Scientist*. *In Press*.
- \* # Δ ^ 41) Kalebich, C.C., M.E. Weatherly, K.N. Robinson, G.M. Fellows, M.R. Murphy, and **F.C. Cardoso**. (2017). Foliar fungicide (pyraclostrobin) application on corn and its effects on corn silage composition. *Animal Feed Science and Technology*. *In press*.

### **Creative Works (Exhibitions, Commissions, Competitions, Performances, Designs, Art or Architecture Executed)**

1. Dairy Focus Lab. 2012. University of Illinois, Department of Animal Sciences. Extension. Dr. Cardoso developed this web site and serves as editor or author for posted materials. This comprehensive dairy focused site is accessible through a unique link and is linked to the Department of Animal Sciences and University of Illinois Extension. <http://www.dairyfocus.illinois.edu>
2. The web site provides educational materials in the areas of dairy nutrition, reproduction, and management; such as:
  - a. Dairy Efficiency Calculator part of the “Dairy Focus Toolbox” (i.e. income over feed cost). Excel file is available on-line for download by users. More than 145 downloads (dairy farmers, veterinarians, nutritionists, professors, and students) from more than 34 different countries.
  - b. Dairy Somatic Cell Count Calculator part of the “Dairy Focus Toolbox” (i.e. mastitis prevention). Excel file is available on-line for download by users. More than 212 downloads (dairy farmers, veterinarians, nutritionists, professors, and students) from more than 32 different countries.
  - c. Dairy Focus Newsletter. More than 82 subscribers (dairy farmers, veterinarians, nutritionists, professors, and students) from more than 17 different countries.
  - d. YouTube videos (17) that collectively have had more than 7,700 visualizations in more than 20 different countries.
  - e. Podcasts (3) that were broadcasted through web based radio stations.
  - f. Social media (Facebook) with more than 355 people connected (likes) from more than 40 different countries.
  - g. “Press mentions” section with more than 40 articles that were reported by the press as a result of formal and informal interviews to Dr. Cardoso.
  - h. Section with information in Spanish for users with no English skills.

3. Margin Protection Program Webinar for dairy producers. Organizer and speaker. Title: “Dairy Focus toolbox – understanding of income over feed cost (IOFC)”. Generated a file with the webinar presentation that is available at the Dairy Focus Lab webpage. Date: September 16, 2014. Live from noon to 1PM.
4. Contributed with the YouTube video (<https://www.youtube.com/watch?v=jIhd8buSpHU>) entitled “Using Metrichheck to Detect Metritis in Post-Partum Dairy Cows” in the chapter entitled “Understanding and Managing Postpartum Uterine Diseases” by Stephen LeBlanc and Rodrigo Carvalho Bicalho in the E-book Large Dairy Herd Management, 3<sup>rd</sup> ed., 2017.

### **Bulletins, Reports, or Conference Proceedings (in print or accepted)**

#### Proceedings

- 1) **Cardoso, F. C.** “3-R Transition Period: Recovery, Reproduction and Results”. Proceedings of the Four-State Dairy Nutrition & Management Conference, June 12 & 13, 2013 – Dubuque, IA. Pages 54-58.
- 2) **Cardoso, F. C.** “Transitioning with Efficiency, is it possible?” Proceedings of the Four-State Dairy Nutrition & Management Conference, June 11 & 12, 2014 – Dubuque, IA. Pages 62-68.
- 3) **Cardoso, F. C.** and J. K. Drackley. “Can Amino Acid Supplementation Improve use of Non-Milk Proteins in Milk Replacers?” Proceedings of the Four-State Dairy Nutrition & Management Conference, June 11 & 12, 2014 – Dubuque, IA. Pages 94-99.
- 4) Luchini, D., M. Wiltbank, R. Shaver, and **F. C. Cardoso**. “The effects of Transition Cow Nutrition on subsequent reproduction”. Proceedings of the Pacific Northwest Animal Nutrition Conference, October 8 & 9, 2014 – Vancouver, British Columbia – CAN.
- 5) **Cardoso, F. C.** “Manejo Nutricional Pré e Pós-Parto para Otimizar a Fertilidade em Vacas de Leite”, (Dairy Nutrition for the Transition Period to Optimize Fertility in Dairy Cows). Proceedings of the I Simpósio da Vaca Leiteira, November 7-8, 2014 – Porto Alegre, RS, Brazil. Pages 15-33.
- 6) Schwab, C., **F. C. Cardoso**, G. Foster, R. Higgs. “Effect of Starch Type on Optimizing Amino Acids in Diets of Dairy Cows”. Proceedings of the Formuleite Conference, November 27-28, 2014 – Lavras, MG, Brazil. Pages 39-45.
- 7) **Haerr, K.** and **F. C. Cardoso**. “Corn Silage: Fungal Disease, the Silent Killer?” Proceedings of the Four-State Dairy Nutrition & Management Conference, June 10 & 11, 2015 – Dubuque, IA. Pages 70-77.
- 8) **Cardoso, F. C.** Displacement of Abomasum in Dairy Cattle – Prevalence, Management, and Diagnostic Tools. Proceedings of the II Simpósio da Vaca Leiteira, October 23-24, 2015 – Porto Alegre, RS, Brazil. Pages 253-272.
- 9) **Cardoso, F. C.** “Impact of feeding amino acids on reproduction”. Proceedings of the Four-State Dairy Nutrition & Management Conference, June 15 & 16, 2016 – Dubuque, IA. Pages 60-67.
- 10) **Cardoso, F. C.** “Pre- and postpartum nutritional management to optimize energy balance and fertility in dairy cows”. Proceedings of the Florida Ruminant Nutrition Conference, February 7 & 8, 2017 – Gainesville, FL. Pages 71-85.

#### Popular Press Publications

- 1) **Cardoso, F. C.** 2014. Illinois Milk Producers’ Association (IMPA) Newsletter. Dr. Cardoso’s Cow Column: Corn silage topic. July.
- 2) **Cardoso, F. C.** 2014. Illinois Milk Producers’ Association (IMPA) Newsletter. Dr. Cardoso’s Cow Column: Reproduction 1 topic. October.
- 3) **Cardoso, F. C.** 2014. “Las 3 R en transición: recuperación, reproducción y resultados – I”. Albéitar, Zaragoza - Spain, N. 180 p 40-41, November. *In Spanish*.
- 4) **Cardoso, F. C.** 2014. “Las 3 R en transición: recuperación, reproducción y resultados – II”. Albéitar, Zaragoza - Spain, N. 181 p 40-42, December. *In Spanish*.
- 5) **Cardoso, F. C.** 2014. Illinois Milk Producers’ Association (IMPA) Newsletter. Dr. Cardoso’s Cow Column: Reproduction 2 topic. December.

- 6) **Cardoso, F. C.** 2015. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: Feeding calves during the winter. March.
- 7) **Cardoso, F. C.** 2015. "It's the change that matters". Hoards Dairyman, Fort Atkinson - WI, N. 9 p 333-334, May.
- 8) **Cardoso, F. C.** 2015. "Es el cambio el que importa". Hoards Dairyman, Valle de los Pinos - Mexico, N. 247 p 414-415, July. *In Spanish.*
- 9) **Cardoso, F. C.** 2015. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: Body condition score; watch for the change. July.
- 10) **Haerr, K** and **F. C. Cardoso.** 2015. "Is fungal disease the silent killer of corn silage?" Progressive Dairyman, Jerome - ID, N. 13 p 64-66, August.
- 11) **Haerr, K** and **F. C. Cardoso.** 2015. "Corn silage: Fungal disease, the silent killer?" Midwest Forage Association – Forage Focus, St. Paul - MN, p 6-7, August.
- 12) **Weatherly, M.** and **F. C. Cardoso.** 2015. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: Are your cows drinking enough water? October.
- 13) **Cardoso, F. C.** 2015. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: Nutritional management before calving can improve fertility in dairy cows. December.
- 14) **Cardoso, F. C.** 2016. "Milk Quality and Antibiotic Residue Avoidance" Progressive Dairyman, Jerome – ID. May 18<sup>th</sup>.
- 15) **Cardoso, F. C.** 2016. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: Veterinary Feed Directive Update and Milk Quality. May.
- 16) **Kalebich, C.** and **F. C. Cardoso.** 2016. "Foliar fungicide effects on corn" Midwest Forage Association – Forage Focus, St. Paul - MN, p 15, May.
- 17) **Kalebich, C.** and **F. C. Cardoso.** 2016. "Effects of foliar fungicide application on silage corn" Progressive Dairyman, Jerome - ID, p 52-54, July 1.
- 18) **Sulzberger, S., Y. Khidoyatov,** and **F. C. Cardoso.** 2016. "Using clay as a buffer in the diet of lactating dairy cows" Progressive Dairyman, Jerome - ID, p 48-49, July 1.
- 19) **Cardoso, F. C.** 2016. Illinois Milk Producers' Association (IMPA) Newsletter. Dr. Cardoso's Cow Column: The right amount of methionine can boost cow fertility. November.
- 20) **Cardoso, F. C.** 2016. "Impacto de los aminoácidos en la reproducción – I". Albéitar, Zaragoza - Spain, N. 201 p 32-34, November. *In Spanish.*
- 21) **Cardoso, F. C.** 2016. "Impacto de los aminoácidos en la reproducción – II". Albéitar, Zaragoza - Spain, N. 202 p 24-25, December. *In Spanish.*
- 22) **Cardoso, F. C.** 2016. "Hit the methionine target". Hoards Dairyman, Fort Atkinson - WI, N. 20 p 741, December.
- 23) **Cardoso, F. C.** 2017. "10 Steps for a successful transition period, part 1" Progressive Dairyman, Jerome – ID. p 54-55, February 25.

#### Departmental Publications

Dr. Cardoso produced 15 articles as part of his Dairy Focus Newsletter series. Articles are available at: <http://dairyfocus.illinois.edu/content/dairy-focus-newsletter>

#### Abstracts (in print or accepted)

Since his appointment Dr. Cardoso had 63 abstracts published in national and international conference proceedings. Thirty-nine (39) were authored or co-authored by Dr. Cardoso and his students.