

# Cristina Caldari, Ph.D.

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## Curriculum Vitae

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### Education

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- **Doctor of Philosophy, Animal Sciences**, University of Florida, Gainesville, FL, *August 2009*  
Dissertation: "Effects of Long-Chain Fatty Acids on Production, Metabolism and Immunity of Holstein Cows"
- **Master of Science, Animal Sciences**, University of Florida, Gainesville, FL, *December 2005*  
Thesis: "Studies on the Effects and Mechanisms of Action of Eicosapentaenoic Acid on PGF<sub>2α</sub> Production in Cultured Bovine Endometrial Cells"
- **Bachelor of Science, Biology**, Universidad de Puerto Rico, Río Piedras, PR, *Magna Cum Laude, May 2002*

### Professional/Teaching Experience

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- **Assistant Professor of Biology**, Denison University, Granville, OH, *August 2017 to present*
- **Assistant Professor of Biology**, Centenary College of Louisiana, Shreveport, *August 2010 to May 2017*
- **Post-doctoral Associate**, Laboratory of Dr. Benjamin Corl, Virginia Polytechnic Institute and State University, Blacksburg, *September 2009 to August 2011*
- **Graduate Research Assistant**, Laboratory of Dr. Lokenga Badinga, University of Florida, Gainesville, *August 2003 to August 2009*
- **Independent Laboratory Instructor**, Department of Animal Sciences, University of Florida, *Fall 2005 and 2008*

### Publications

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- **Caldari-Torres, C.**, M. L. McGilliard, and B.A. Corl. 2016. Esterification of essential and non-essential fatty acids into distinct lipid classes in ruminant and non-ruminant tissues. *Comp. Biochem. Physiol. B Biochem. Mol. Biol.* 200:1-5.
- **Caldari-Torres, C.**, A.L. Lock, C.R. Staples, and L. Badinga. 2011. Performance, Metabolic and Endocrine Responses of Periparturient Holstein Cows Fed Three Sources of Fat. *J. Dairy Sci.* 94:1500-10.
- **Caldari-Torres, C.**, E. D'Agosto, M.C. Perdomo, C.R. Staples, and L. Badinga. 2010. Concentrations of plasma metabolites and hormones in periparturient Holstein cows fed two fat sources. *J. Dairy Sci.* 93:E-Suppl 1, p. 715.
- **Caldari-Torres, C.** 2009. Effects of Long-chain Fatty Acids on Production, Metabolism and Immunity of Holstein Cows. Dissertation presented to the Graduate School of The University of Florida.
- Rodríguez-Sallaberry, C., **C. Caldari-Torres**, W. Collante, C.R. Staples, and L. Badinga. 2007. Plasma Prostaglandin and Cytokine Concentrations in Periparturient Holstein Cows Fed Diets Enriched in Saturated or *Trans* Fatty Acids. *J. Dairy Sci.* 90:5446-5452.
- **Caldari-Torres, C.**, C. Rodríguez-Sallaberry, E.S. Greene, and L. Badinga. 2006. Differential Effects of n-3 and n-6 Fatty Acids on Prostaglandin F<sub>2α</sub> Production by Bovine Endometrial Cells. *J. Dairy Sci.* 89:971-977.
- Rodríguez-Sallaberry, C.J., **C. Caldari-Torres**, E.S. Greene, and L. Badinga. 2006. Conjugated Linoleic Acid Reduces Phorbol Ester-Induced Prostaglandin F<sub>2α</sub> Production by Bovine Endometrial Cells. *J. Dairy Sci.* 89:3826-3832.

- Greene E.S., C. Rodríguez-Sallaberry, **C. Caldari-Torres**, and L. Badinga. 2006. Effects of Conjugated Linoleic Acids on Lipid Metabolizing Genes and High-Density Lipoprotein Cholesterol Production in Human Hepatocytes. *J. Appl. Res.* 6;132-141.
- Rodríguez-Sallaberry, C.J., **C. Caldari-Torres**, E.S. Greene, C.R. Staples, and L. Badinga. 2006. Production, metabolic and reproductive responses of transition Holstein cows fed *trans* fatty acids. *J. Anim. Sci.* 84;Suppl. 1.
- **Caldari-Torres, C.** 2005. Studies on the Effects and Mechanisms of Action of Eicosapentaenoic Acid on PGF<sub>2</sub> Production in Cultured Bovine Endometrial Cells. Thesis presented to the Graduate School of The University of Florida.

## Scientific Abstracts

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- **Danchine, V. and C. Caldari-Torres.** 2018. Effects of omega-3 and omega-6 fatty acids on NO and IL-6 cytokine concentrations in murine macrophages. Proceedings of the 33<sup>rd</sup> Annual Ohio Physiological Society Meeting, Cincinnati, OH.
- **Beck, J. and C. Caldari-Torres.** 2018. Developing a method of co-incubation of macrophages and adipocytes to evaluate cellular communication. Proceedings of the 33<sup>rd</sup> Annual Ohio Physiological Society Meeting, Cincinnati, OH.
- **Caldari-Torres, C.,** Banta-Long, W., Bruss, A., Choi, E., Fiegel, H., Sherman Jollis, M., Ly, S., and S. Viswanathan. 2018. Hemolymph Glucose Levels as a Measure of Crayfish Stress: A Methodology Using a Human Glucometer. *FASEB* 32:E-Suppl 1.
- **Caldari, C.** 2016. Use of animal gastrointestinal tracts in undergraduate physiology courses. Proceedings of the 2016 APS Institute on Teaching and Learning, Madison, WI.
- Perkins, R., A. Stephens, and **C. Caldari.** The effect of perfluorooctanoic acid on the metamorphosis of *Rana catesbeiana*. Proceedings of the 2016 Beta Beta Beta South Central Regional Convention, Cedar Hill, TX.
- Sobelman, C.S., J. K. Suagee, and **C. Caldari.** 2015. Dog ownership increases the richness of the cutaneous microbiome. Proceedings of the ADSA-ASAS Joint Annual Meeting, Orlando, FL.
- **Caldari, C.** 2015. Use of Clicker Questions and Peer Instruction in Case Study-Based Learning: A Working Model. *JMBE* 16:1, p. 109.
- Madden, C., P. Eugene, T. L. Nguyen, R. Abo-Zahrah, M. Fechter, **C. Caldari-Farren**, and D. P. Brownholland. 2013. Synthesis of straight-chain tetraether lipids with varying alkyl chain length. Proceedings of the American Chemical Society National Meeting, New Orleans, LA.
- **Caldari-Torres, C.** and B.A. Corl. 2011. Incorporation of essential and non-essential fatty acids into distinct lipid classes in cultured bovine and porcine small intestine and muscle explants. *J. Dairy Sci.* 94:E-Suppl 1, p. 731.
- **Caldari-Torres, C.,** A.J. Lengi, M.L. McGilliard, D.M. Shepherd, J.A. Stamey, and B.A. Corl. 2010. Incorporation of essential and non-essential fatty acids into distinct lipid classes in cultured bovine and porcine liver slices. *J. Dairy Sci.* 93:E-Suppl 1, p. 777.
- **Caldari-Torres, C.,** E. D'Agosto, M.C. Perdomo, C.R. Staples, and L. Badinga. 2010. Concentrations of plasma metabolites and hormones in periparturient Holstein cows fed two fat sources. *J. Dairy Sci.* 93:E-Suppl 1, p. 715.
- Badinga, L., Rodríguez-Sallaberry, C., **Caldari-Torres, C.,** Perdomo, M.C., and C.R. Staples. 2008. Impact of *Trans*-Fatty Acids on Endometrial Prostaglandin Biosynthesis and Fertility in Dairy Cattle. Proceedings of the 6<sup>th</sup> International Congress on Farm Animal Endocrinology, p. 18.
- **Caldari-Torres, C.,** M. Perdomo, and L. Badinga. 2008. Effects of Long-Chain Fatty Acids on Concanavalin A-induced Cytokine Production by Bovine Peripheral Blood Mononuclear Cells. *J. Dairy Sci.* 91:E-Suppl 1, p. 540.
- Staples, C.R., B. do Amaral, F. Silvestre, **C. Caldari-Torres**, F.M. Cullens, L. Badinga, J.D. Arthington, and W.W. Thatcher. 2008. Immune Responses to Disease/Disorders in the Dairy Animal and Potential Effects of Essential Fatty Acids. Proceedings of the Florida Ruminant Nutrition Symposium, p. 139.

- **Caldari-Torres, C.,** W.R. Collante, and L. Badinga. 2007. Conjugated Linoleic Acids Attenuate Lymphocyte Proliferation and Interleukin-4 Production in Bovine Peripheral Blood Mononuclear Cells Challenged with Concanavalin-A. *J. Dairy Sci.* 90:Suppl 1, p. 63.
- Badinga, L., and **C. Caldari-Torres.** 2007. Dietary Omega-3 and Omega-6 Fatty Acids and Reproduction in Dairy Cattle. *J. Dairy Sci.* 90:Suppl 1, p. 400.
- Rodríguez-Sallaberry, C.J., **C. Caldari-Torres,** E.S. Greene, C.R. Staples, and L. Badinga. 2006. Production, metabolic and reproductive responses of transition Holstein cows fed *trans* fatty acids. *J. Anim. Sci.* 84;Suppl. 1.
- **Caldari-Torres, C.,** C.J. Rodríguez-Sallaberry, E.S. Johnson, and L. Badinga. 2005. Eicosapentaenoic Acid and Peroxisome Proliferator-Activated Receptor Delta Regulate Endometrial Prostaglandin F<sub>2α</sub> Production Through Distinct Signaling Mechanisms in Bovine Endometrial Cells. *Biol. Reprod.* 142; Suppl. 1.
- Rodríguez-Sallaberry, C.J., **C. Caldari-Torres,** E.S. Johnson, and L. Badinga. 2005. Effects of *cis*- and *trans*-Octadecenoic Acids on Phorbol Ester-induced Prostaglandin F<sub>2α</sub> Production in Bovine Endometrial Cells. *Biol. Reprod.* 140;Suppl. 1.

## Special Presentations

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- Panelist at “Should we bioengineer the mosquito?” community forum, Sci-Port Discovery Center, Shreveport, LA, 2006.
- “Televised case studies in the Biology Classroom”. “Microbrew” presented at the 2015 ASMCUE Meeting, Austin, TX, 2015.
- “Effects of n-3 Fatty Acids on ConA-induced Cytokine Production by Bovine Peripheral Blood Mononuclear Cells”. Seminar presented at “Graduate Student Council Research Forum”, University of Florida, 2008.
- “Conjugated Linoleic Acids Attenuate Lymphocyte Proliferation and IL-4 Production in Bovine Peripheral Blood Mononuclear Cells Challenged with Concanavalin-A”. Seminar presented at “The Seventh Annual Graduate Research Symposium”, College of Agricultural and Life Sciences, University of Florida, 2007.
- “Effects of Fatty Acids on Immunological Parameters: Implications for Reproductive Physiology”. Invited speaker at Universidad Centroccidental “Lisandro Alvarado”, Barquisimeto, Venezuela, 2006. (*Delivered in Spanish.*)
- “Physiological Effects and Mechanism of Action of Eicosapentaenoic Acid in Bovine Endometrial Cells”. Invited speaker at Universidad Centroccidental “Lisandro Alvarado”, Barquisimeto, Venezuela, 2006. (*Delivered in Spanish.*)

## Student Projects

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- Veronika Danchine, *June-December 2018*
  - “Effects of omega-3 and omega-6 fatty acids on activation and cytokine concentrations in murine macrophages.”  
Poster presented at the 33rd Annual Ohio Physiological Society Meeting, Cincinnati, OH.
- Jordan Beck, *June-December 2018*
  - “Developing a method of co-incubation of macrophages and adipocytes to evaluate cellular communication.”  
Poster presented at the 33rd Annual Ohio Physiological Society Meeting, Cincinnati, OH.
- Rachel Perkins and Alyssa Stephens, *August 2015-May 2016*
  - “Effects of perfluorooctanoic acid on the metamorphosis of *Rana catesbeiana*”  
Research project won John C. Johnson Award for Excellence in Student Research at the 2016 Beta Beta Beta National Biological Honor Society South Central Regional Convention, Cedar Hill, TX.
- Celia Sobelman (*June 2014-July 2015*) and Sushant Prem (*August 2015-May 2016*)
  - “Characterization of cutaneous flora of co-habiting humans and dogs”

Poster presented at the 2015 American Dairy Science Association-American Society of Animal Science Joint Annual Meeting, Orlando, FL.

- Alexandra Ross, *June 2012-August 2013*
  - “The effects of increasing doses and incubation times of lipopolysaccharide on interleukin-6 production by murine macrophages”  
Poster presented at the 2013 Centenary College Student Research Forum, Shreveport, LA.
  - “The effects of increasing passages on growth rate and lipopolysaccharide-stimulated production of interleukin-6 and nitric oxide in murine macrophages”  
Poster presented at the 2014 Centenary College Student Research Forum, Shreveport, LA.
- Charles Madden, *June-August, 2012*
  - “Assessment of bolalipids as stable carriers of vaccines”  
Poster presented at the 2013 American Chemical Society National Meeting, New Orleans, LA.

## Service

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### Service to Denison University

- Search committee:
  - Biology- Assistant Professor of Biology-*Fall 2018*

### Service to Centenary College

- Committees:
  - Academic Policy Committee, *August 2016-present*
  - TREK Committee Member, *August 2015-May 2016*  
The TREK program is a graduation requirement for Centenary students. The program integrates experiential learning in the areas of Career, Culture, and Community into every student’s curriculum.
  - Institutional Effectiveness Committee Chair, *January 2014-May 2016*
  - Institutional Effectiveness Committee Secretary, *August 2013-December 2013*  
The Institutional Effectiveness Committee is tasked with the implementation and assessment of student learning outcomes across all divisions, as well as the training of faculty/staff on program report preparation and use of rubrics, and the review of the college’s accreditation materials.
  - Faculty Development Committee Secretary, *January 2013-May 2013*
  - Woodrow Wilson Visiting Fellow Committee, *January 2013-May 2015*
  - Safe Zone of Centenary College Director, *June 2013-June 2014*
  - Safe Zone of Centenary College, *November 2011-present*  
Safe Zone is a program that stems from the Diversity Committee. It aims to recruit and train Allies for the LGBTQ community in an effort to provide a fair and equitable campus for students of all sexual orientations and gender identities.
- Advising:
  - Faculty Adviser to Centenary College Honor Court, *August 2015-present*
  - Beta Beta Beta Biological Honors Society Faculty Adviser, *January 2013-present*  
Centenary College obtained its Beta Beta Beta Biological Honors Society chapter under my advising in 2013.
  - Student Adviser, *August 2012-present*
  - First-year Student Adviser, *July-August 2013*

- Invited speakers:
  - Karitza Alonso, Esq.-“Human Rights: A Current Perspective”, *Spring 2015*
  - Dr. Fuller Bazer, Regents Fellow, Distinguished Professor & O. D. Butler Chair of Animal Science at Texas A&M  
“Pregnancy Recognition Signaling in Mammals”, *Spring 2012*
- Search committees:
  - Mathematics- Assistant Professor of Mathematics-*Spring 2016*
  - Biology- Visiting Assistant Professor of Biology-*Spring 2016*
  - Biology- Assistant Professor of Neurobiology-*Spring 2014*
  - Biology- Visiting Assistant Professor of Neurobiology-*Spring 2013*
  - Biology- Assistant Professor of Biology-*Spring 2013*

### **Service to the Profession**

- Journal reviewer:
  - Reviewer for the Pathophysiology Journal, Editor-in-Chief: J. Steven Alexander, *October 2014-present*
  - Reviewer for the Journal of Dairy Science, Senior Editor for the Physiology and Management section: Frank Gwazdauskas, *September 2009 to August 2010*
- Non-affiliated, scientist member of Chimp Haven Sanctuary Chimp Care Committee (SCCC), *May 2014-present*  
The SCCC is the equivalent of an IACUC for Chimp Haven, one of the largest chimp sanctuaries in the US. Its main objective is to ensure that the highest level of care is provided to Chimp Haven’s chimpanzee residents. Some of the duties of the SCCC include review and approval/denial of potential behavioral research protocols, review of active protocols, and oversight of the animal care program (including semi-annual inspection of facilities, review of disaster plans/staff training procedures, etc.)

### **Awards and Honors**

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- Louisiana Board of Regents Endowed Professorship in Natural Sciences, *2014, 2015, 2016*
- Centenary College of Louisiana Faculty Research Support Grant, *2015*
- Centenary College of Louisiana Faculty-Student Summer Research Grant, *2012, 2014*
- Centenary College of Louisiana Mattie Allen Broyles Inaugural-Year Chair, *2011*
- University of Florida Graduate Student Council (GSC) Travel Grant Recipient, *2007, 2008, 2009*
- University of Florida Research and Graduate Programs Travel Grant Recipient, *2008, 2009*
- University of Florida Institute of Food and Agricultural Sciences (IFAS) Travel Grant Recipient, *2009*
- University of Florida Institute of Food and Agricultural Sciences (IFAS) Travel Grant Recipient, *2007, 2008*
- Land O’Lakes, Purina Feed LLC Graduate Student Poster Contest Winner, American Dairy Science Association Meeting, San Antonio, TX, *2007*
- University of Florida Agricultural Women’s Club Scholarship Recipient, *2007*
- Gamma Sigma Delta (Honor Society of Agriculture) Member, *2006*
- University of Florida Alumni Fellow, *2005-2009*
- Golden Key Honor Society Member, *2000-present*
- Dean’s List, University of Puerto Rico, San Juan, PR, *1997-2002*

## Certifications/Training Courses

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- Protecting Human Research Participants Web-based Training, National Institute of Health, 2014
- Virginia Tech-Specific IACUC Training, Institutional Animal Care and Use Committee, Virginia Tech, 2010
- Working with the IACUC, Institutional Animal Care and Use Committee, Virginia Tech, 2010
- Radiation Safety Training, Environmental, Health and Safety Services, Virginia Tech, 2009
- Radiation Safety Short Course, Environmental, Health and Safety, University of Florida, 2003
- Working with the UF IACUC (Agriculture and Wildlife), Institutional Animal Care and Use Committee, University of Florida, 2005
- Hazardous Waste Tutorial, Environmental Health and Safety, University of Florida, 2005

## Professional Development

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- American Physiological Society Second Institute on Teaching and Learning, Madison, WI, 2016
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, Orlando, FL, 2015
- American Society of Microbiology Conference on Undergraduate Education, Austin, TX, 2015
- American Physiological Society First Institute on Teaching and Learning, Bar Harbor, ME, 2014
- Association of American Colleges and Universities Annual Meeting, Washington, DC, 2014
- Experimental Biology Annual Meeting, Boston, MA, 2013
- American Society of Microbiology/Joint Genome Institute (ASM/JGI) Bioinformatics Institute, Washington, DC, 2012
- Experimental Biology Annual Meeting, Washington, DC, 2011
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, New Orleans, LA, 2011
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, Denver, CO, 2010
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, Quebec, Canada, 2009
- 20<sup>th</sup> Annual Florida Ruminant Nutrition Symposium, Gainesville, FL, 2009
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, Indianapolis, IN, 2008
- 8<sup>th</sup> Annual Graduate Research Symposium, Gainesville, FL, 2008
- Graduate Student Council Research Forum, Gainesville, FL, 2008
- 19<sup>th</sup> Annual Florida Ruminant Nutrition Symposium, Gainesville, FL, 2008
- 7<sup>th</sup> Annual Graduate Research Symposium, Gainesville, FL, 2007
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, San Antonio, TX, 2007
- 18<sup>th</sup> Annual Florida Ruminant Nutrition Symposium, Gainesville, FL, 2007
- American Dairy Science Association/American Society of Animal Science Joint Annual Meeting, Minneapolis, MN, 2006
- 6<sup>th</sup> Annual Graduate Research Symposium, Gainesville, FL, 2006
- 17<sup>th</sup> Annual Florida Ruminant Nutrition Symposium, Gainesville, FL, 2006
- 16<sup>th</sup> Annual Florida Ruminant Nutrition Symposium, Gainesville, FL, 2005



- 38<sup>th</sup> Annual Society for the Study of Reproduction Meeting, Quebec, Canada 2005
- 2<sup>nd</sup> Annual Animal Molecular and Cellular Biology Research Symposium, Brooksville, FL, 2004

## **Professional Organizations**

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- Member of American Physiological Society, 2016-present
  - Member of American Society for Microbiology, 2015-2016
  - Member of American Society of Animal Science, 2015-2016
  - Member of American Dairy Science Association, 2006-2011
  - Member of The Society for the Study of Reproduction, 2004-2007
  - Vice-President of Social Affairs, Animal Science Graduate Student Association, University of Florida, 2004
  - Member of Animal Science Graduate Student Association, University of Florida, 2003-2009
  - Member of Interdisciplinary Reproductive Biology Group, University of Florida, 2003
-