CURRICULUM VITAE

Luis Orlindo Tedeschi

November 2021

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CURRICULUM VITAE

I. Personal Information

Name: Luis Orlindo Tedeschi

Rank: Professor and Fellow

Address: 230 Kleberg Center
2471 TAMU
College Station, TX 77843-2471

II. Education

2017 – Present University of Sassari, Sassari, Italy
Honorary Professor, Dipartimento di Scienze Agraria

2015 – Present Texas A&M University, College Station, TX
Professor, Department of Animal Science

2012 – Present Texas A&M University, College Station, TX
Graduate Faculty, Department of Nutrition and Feed Science

2010 – 2015 Texas A&M University, College Station, TX
Associate Professor, Department of Animal Science

2005 – 2012 Texas A&M University, College Station, TX
Intercollegiate Faculty of Nutrition

2005 – 2010 Texas A&M University, College Station, TX
Assistant Professor, Department of Animal Science

2002 – 2005 Cornell University, Ithaca, NY
Research Associate – Animal growth and modeling

2001 – 2002 Cornell University, Ithaca, NY
Post-Doctorate – Ruminant nutrition and modeling

Ph.D. Cornell University, Ithaca, NY
Animal Science, Animal Nutrition, Microbiology – 2001

M.S. University of São Paulo, São Paulo, Brazil
Animal and Forage Sciences – 1996

B.S. University of São Paulo, São Paulo, Brazil
Agronomy Engineering – 1991

III. Honors and Awards

2020 Texas A&M University's College of Agriculture and Life Sciences (COALS) Dean's Outstanding Achievement Award for Research

2020 Federation of Animal Science Societies (FASS)-American Society of Animal Science (ASAS) New Frontiers in Animal Nutrition Award

2020 American Society of Animal Science (ASAS) Animal Growth and Development Award

2019 Texas A&M AgriLife Vice Chancellor's Award in Excellence for Research

2019 Texas A&M University's Chancellor EDGES (Enhancing Development and Generating Excellence in Scholarship) Fellowship

2018 Texas A&M University's College of Agriculture and Life Sciences (COALS) Dean's Outstanding Achievement Award for International Involvement

2017 American Feed Industry Association (AFIA) Ruminant Nutrition Award

2017 ARPAS Diplomate of American College in Animal Nutrition (ACAN)

2016 Texas A&M AgriLife Research Faculty Fellow

2013 São Paulo Research Foundation (FAPESP) Scholarship Award – Visitor Professor, Brazil

2013 J. William Fulbright Foreign Scholarship Award — Brazil and United States

2012 Texas A&M AgriLife Vice Chancellor's Award in Excellence for International Involvement

2011 Sir Frederick McMaster Fellowship Award – Research Fellowship to CSIRO Livestock Industries, Australia

IV. Experience

Date:	2015 to present
Current Position:	Professor – Ruminant Nutrition
Appointment:	9-month, Tenured, 60% Research, 30% Teaching, 10% Service

Teaching Responsibilities are focused primarily on the graduate education of students seeking a degree in Animal Science. Dr. Tedeschi currently teaches the (1) *ANSC 604-600 – Ruminant Nutrition* with an average enrollment of 10 to 15 students per year; (2) *ANSC 623/POSC 624 – Precision Diet Formulation* focused on development of nutritional management strategies to optimize animal performance while reducing the impact of animal feeding operations on the environment with an average enrollment of 20-25 students per year (undergraduates and graduates); (3) ANSC 415/ANSC 615 – Brazil Comparative

Ruminant Production summer Study Abroad with the objectives to expose students to two contrasting and different scenarios of ruminant production in Brazil, illustrate proper management methods of ruminant production for meat, dairy foods and fiber that generate substantial income to small holder farmers while enhancing ecosystem health, especially in an agrosilvopastoral context, and position students to be more competitive for jobs and ready to work in an international environment; and (4) ANSC 489/ANSC 689 – Introduction to System Dynamics for Agriculture and Life Sciences is offered during the winter of even years and its objective is to introduce undergraduate and graduate students to system dynamics modeling for the analysis of business policy and strategy, to visualize a business organization in terms of the structures and policies that create dynamics and regulate performance, and to allow students to create 'microworlds,' management flight simulators where space and time can be compressed, slowed, and stopped so we can experience the long-term side effects of decisions, systematically explore new strategies, and develop our understanding of complex systems. Dr. Tedeschi is currently involved in mentoring and advising graduate students in the ruminant nutrition research program (ANSC 691 and 491) and assisting in advising graduate students in ruminant nutrition disciplines within the Department of Animal Science. Dr. Tedeschi is part of the animal nutrition, and beef and dairy cattle sections.

Research Responsibilities are focused on the development and evaluation of dynamic simulation mathematical models used to quantify nutrient availability and requirements for energy and nutrients in ruminant animal production systems and on the development of new methodologies for *in vitro* analysis of nutrient availability of feedstuffs. The faculty member is developing research collaborations with scientists in ruminant nutrition, microbiology, reproductive physiology, and animal breeding and genetics both on campus as well as those located at research and extension centers off-campus to obtain research-funding support to further develop dynamic simulation models for growing calves and cow/calf production systems.

Service Responsibilities are focused on the advancement and deployment of data-driven and model-driven decision support systems to assist with teaching, research, and extension of nutrition of large and small ruminants. Dr. Tedeschi is involved with departmental/college/university committees, service to professional societies/associations such as editorial boards and peer review of manuscripts or grant proposals, and service to producers/consultants/researchers such as laboratory analyses and advising boards.

Date:	2010 to 2015
Position:	Associate Professor – Ruminant Nutrition
Appointment:	10-month, Tenured, 60% Research, 30% Teaching, 10% Service

Teaching Responsibilities were focused primarily on the graduate education of students seeking a degree in Animal Science or through the Interdisciplinary (Intercollegiate) Faculty of Nutrition (IFN). Dr. Tedeschi taught the (1) *ANSC 604-600 – Ruminant Nutrition* with an average enrollment of 10 to 15 students per year; (2) *ANSC 623/POSC 624 – Precision Diet Formulation* focused on the development of nutritional management strategies to optimize animal performance while reducing the impact of animal feeding operations on the environment with an average enrollment of 20-25 students per year

(undergraduates and graduates); and (3) ANSC 489/ANSC 689 – Brazil Comparative Ruminant Production summer Study Abroad with the objectives to expose students to two contrasting and different scenarios of ruminant production in Brazil, illustrate proper management methods of ruminant production for meat, dairy foods and fiber that generate substantial income to smallholder farmers while enhancing ecosystem health, especially in an agrosilvopastoral context, and position students to be more competitive for jobs and ready to work in an international environment. Dr. Tedeschi was involved in mentoring and advising graduate students in the ruminant nutrition research program (ANSC 691 and 491) and assisting in advising graduate students in ruminant nutrition disciplines within the Department of Animal Science. Dr. Tedeschi was part of the animal nutrition, beef and dairy cattle sections.

Research Responsibilities were focused on the development and evaluation of dynamic simulation mathematical models used to quantify nutrient availability and requirements for energy and nutrients in ruminant animal production systems and on the development of new methodologies for *in vitro* analysis of nutrient availability of feedstuffs. The faculty member had developed research collaborations with scientists in ruminant nutrition, microbiology, reproductive physiology, and animal breeding and genetics both on campus as well as those located at research and extension centers off-campus to obtain research-funding support to further develop dynamic simulation models for growing calves and cow/calf production systems.

Service Responsibilities were focused on the advancement and deployment of data-driven and model-driven decision support systems to assist with teaching, research, and extension of nutrition of large and small ruminants. Dr. Tedeschi was involved with departmental/college/university committees, federal agencies such as the National Academy of Sciences, service to professional societies/associations such as editorial boards and peer review of manuscripts or grant proposals, and service to producers/consultants/researchers such as laboratory analyses and advising boards.

Date:	2005 to 2010
Position:	Assistant Professor (Texas A&M University)
Appointment:	12-month, Tenure track, 60% Research, 30% Teaching, 10% Service

Teaching Responsibilities were focused primarily on the graduate education of students seeking a degree in Animal Science or through the Interdisciplinary (Intercollegiate) Faculty of Nutrition (IFN). Dr. Tedeschi taught the *ANSC 604-600 – Ruminant Nutrition* with an average enrollment of 10 to 15 students per year, *ANSC 623/POSC 624 – Precision Diet Formulation* focused on the development of nutritional management strategies to optimize animal performance while reducing the impact of animal feeding operations on the environment with an average enrollment of 20-25 students per year (undergraduates and graduates), and *NUTR 681-601 – Nutrition Seminar* with an average enrollment of 15 to 25 graduate students. Dr. Tedeschi was involved in mentoring and advising graduate students in the ruminant nutrition research program (ANSC 691 and 491) and advising graduate students in ruminant nutrition disciplines within the Department of Animal Science. Dr. Tedeschi was part of the animal nutrition, and beef and dairy cattle sections.

Research Responsibilities were focused on the development and evaluation of dynamic simulation mathematical models used to quantify nutrient availability and requirements for energy and nutrients in

ruminant animal production systems and on the development of new methodologies for *in vitro* analysis of nutrient availability of feedstuffs. The faculty member had developed research collaborations with scientists in ruminant nutrition, microbiology, reproductive physiology, and animal breeding and genetics both on campus as well as those located at research and extension centers off-campus to obtain research-funding support to further develop dynamic simulation models for growing calves and cow/calf production systems.

Date:	2002 to 2005
Position:	Research Associate (Cornell University)
Appointment:	12-month, Non-tenure track, 90% Research and 10% Teaching

Teaching Responsibilities included *ANSC 412 - Livestock and the Environment* and *ANSC 413 - Contemporary Issues in Animal Science*. The *ANSC 412 – Livestock and the Environment* (4 credits) had an average enrollment of 50 to 60 undergraduate and graduate students. The course lectures were designed to address issues surrounding livestock and the environment, including competition with humans for food resources, the impact of animal products on human health, and the impact of livestock farms on environmental/community problems, including odor, and pathogens and excess nutrients effects on water quality. In addition, students would be exposed to whole farm nutrient management planning, including soil and crop sciences and animal science laboratory work. The *ANSC 413 - Contemporary Issues in Animal Science* (2 credits) had an average enrollment of 60 to 70 undergraduate and graduate students. The lectures in this course included an overview of emerging issues surrounding the use of livestock for food production; animal rights and animal welfare issues; efficiency of use of resources by using animals vs plants for human food production; environmental concerns involving livestock production; issues surrounding the use of animal products in the human diet; issues surrounding the use of biotechnology in food-producing animals; livestock production and food safety; livestock in sustainable farming systems in developing countries; and developing sustainable livestock production systems in North America.

Research Responsibilities included refinements of (A) the Cornell Net Carbohydrate and Protein Systems (CNCPS) nutrition model for beef and dairy cattle and for small ruminants and (B) the Cattle/Cornell Value Discovery System (CVDS) growth model, and (C) the development of the CVDS for cow/calf operations and determination of production efficiency in cattle operations. More specifically, the responsibilities were (1) revisions of the CNCPS rumen model. Initially, the focus of the revision of the rumen model will be to mechanistically predict rumen pH and VFA. Other areas that need to be addressed include the determination of feed passage rates, and internal consistency of digestion and passage rates in computing feed fractions escaping digestion in the rumen; (2) revisions of the CNCPS feed library, with the following being explored: (2.1) development of a method for computing CNCPS compatible digestion rates for carbohydrate and protein fractions in feeds from commercial feed analysis laboratories rates determined with limited time points; (2.2) development of an alternative system in which fewer numbers of inputs are needed to determine the amounts of carbohydrate and protein fractions in feeds from actual feed analysis, considering the cost and limitations in laboratory capabilities; and (2.3) a more mechanistic approach to predicting carbohydrate and protein digestion rates to simplify on-farm use of the CNCPS; (3) revisions of the growth model. A more mechanistic

approach is needed to adjust for differences in mature size and to predict body composition at any point in time, and to predict the efficiency of conversion of ME to NEg based on body composition; (4) revisions of the diet optimization procedure. More powerful algorithms such as multiobjective programming and fractional programming need to be used for nutrient optimization for use in diet and whole herd nutrient optimization; (5) development of a level 3 solution that uses estimates of VFA absorbed from the revised rumen model to predict available ME; (6) develop an improved model to account for nitrogen utilization and excretion within the structure of the CNCPS; (7) development of the approach needed for a level 4 solution, which will be a metabolism model to mechanistically model and simulate milk and meat composition to improve the prediction of energy and protein requirement for a target production level; and (8) development of the Cornell Value Discovery System model for use in individual cattle management systems and in progeny tests to identify differences in feed efficiency among group fed individuals.

V. Teaching

Program Statement

The complexity of nutrient fluxes in concentrated animal feeding operations requires a thorough understanding of the adaptation and evolution of ruminants, physiological and anatomical differences between ruminant and nonruminants animals, and digestibility of nutrient in order to adequately formulate diets that match the energy and nutrient requirements of the ruminant animal with the energy and nutrient supplied by the ration, pasture, and/or feed supplements. This concept is called *Precision Feeding*. The Department of Animal Science offers courses that provide general animal nutrition and science, principles of animal nutrition, and feeds and feeding. Therefore, *ANSC 604-600 Ruminant Nutrition* and *ANSC 623/POSC 624 – Precision Diet Formulation* courses provide the complementary and necessary education and scientific training that students need to adequately conduct *Precision Feeding* concepts in ruminants. Dr. Tedeschi has also kept abreast of developments in the field of Systems Thinking and Systems Dynamics by reading current literature and participating in professional conferences.

Courses

Summary

Graduate Courses	Credit Hours	Frequency Taught	Total Students	Weighted Average
ANSC 604-600 Ruminant Nutrition	3	Every Fall, since 2005	99	**4.44**
ANSC 623-523 Precision diet formulation	3	Every other Spring, first in 2007	23	**4.54**

NUTR 681-601 Nutrition seminar	1	Every Spring and Fall, 2006-2010	108	**4.54**
ANSC 415/615-123 Study Abroad	3	Summer, since 2011	21	**4.76**

*Cross-listed with POSC 625.

Description

ANSC 604-600 – Ruminant Nutrition. Credits: 3. Fall semester. Current concepts in anatomy, physiology of digestion and metabolism in ruminant nutrition and their relationships to nutrition practice and research with emphasis on ruminants. Prerequisites: ANSC 601 or 602, BICH 411 or 603 and/or approval of department head.

ANSC 623-523 – Precision diet formulation. Credits: 3. Spring semester. This course presents the theoretical and applied principles associated with precision feeding and diet formulation to match the requirement and supply of energy and other nutrients by animals while mitigating environmental pollution. The course covers optimization using the least-cost formulation, ingredient inventory, farm and feed mill management, and nutrient management of non-ruminants (poultry, swine, horse, and fish) and ruminant animals (beef and dairy). Microcomputers are used extensively throughout the course to access a variety of network resources. This course is team-taught with Dr. Bailey.

NUTR 681-601 – Nutrition seminar. Credit: 1. Spring and Fall semesters. The goal of this seminar series is to allow graduate students of nutrition sciences to broaden their knowledge in cutting-edge issues in nutrition by attending seminars from established national and international investigators in the field. Students also have a unique opportunity to have face-to-face discourse with these investigators to learn more about their work and perhaps open opportunities for post-graduate activities. Several world-recognized researchers in nutrition have accepted Dr. Tedeschi's invitation to present seminars at the NUTR 681-601, including Dr. Peter Van Soest, Cornell University; Dr. Michael Allen, Michigan State University; Dr. Dale E. Bauman, Cornell University; and Dr. David L. Harmon, University of Kentucky.

ANSC 415/615-123 – Brazil: Comparative Ruminant Production. Credit: 6 (ANSC 415-123) or 3 (ANSC 615-123). This course exposes students to two contrasting and different scenarios of ruminant production in Brazil. Ruminant animals (cattle, water buffalo, sheep, and goats) have an unambiguous characteristic: they can convert human-inedible resources (e.g., cellulose) into animal products (e.g., milk and meat) for human consumption. Globalization has imposed changes in economic and political arenas. Certain changes in international agriculture have created new opportunities for the efficient production of ruminants in different parts of the world. Brazil and the US together have the largest commercial herd of ruminant animals in the world and different production systems. Students will attend a one week at the *Universidade Federal Rural de Pernambuco* (UFRPE) in which small ruminant production (sheep and goats) will be emphasized. Then, in the following week, students will spend a week at the *Universidade de São Paulo*, Campus Pirassununga (USP/FZEA), to learn about large ruminant production (beef and dairy cattle, water buffalo, and product processing).

ANSC 489/689-123 – Introduction to System Dynamics for Agriculture and Life Sciences. Credits: 3. Winter semester (January) or even years. This course introduces undergraduate and graduate students to system dynamics modeling for the analysis of business policy and strategy.

Students will learn to visualize a business organization in terms of the structures and policies that create dynamics and regulate performance, to create 'microworlds,' management flight simulators where space and time can be compressed, slowed, and stopped so we can experience the long-term side effects of decisions, systematically explore new strategies, and develop our understanding of complex systems. Students learn systems thinking and system dynamics methodology that will allow them to elicit and map the structure of complex systems and relate those structures to their dynamics, model and simulates complex systems, test and improve computer models, and develop models in the group.

International Beef Cattle Academy (IBCA). Tedeschi is the organizer/chair for the Nutrition Management and Requirements module. This module has 20 hours of recorded lectures and 8 hours of face-to-face (field visits and tours) during the Beef Cattle Short Course (August). This module was a team-taught effort, including faculty from Oklahoma State University and Virginia Tech University.

Chronological List of Courses, Number of Students, and Average Evaluation

Year	Term	Course	Students	Average Scores**		
				Course	Subject	Level
2005	Fall	ANSC 604	9	4.05	4.73	
2006	Fall	NUTR 681	10	4.33	4.78	
2006	Spring	ANSC 604	10	4.84		
2007	Fall	ANSC 604	4	4.63	4.7	
2007	Fall	NUTR 681	10	4.21	4.7	
2007	Spring	ANSC 623*	9	4.96	4.65	
2007	Spring	NUTR 681	9	4.37	4.65	
2008	Fall	ANSC 604	7	4.79	4.7	
2008	Fall	NUTR 681	15	4.75	4.7	
2008	Spring	NUTR 681	10	4.64	4.65	
2009	Fall	ANSC 604	10	4.78	4.68	
2009	Fall	NUTR 681	18	4.41	4.68	
2010	Fall	ANSC 604	12	4.26	4.77	
2010	Fall	NUTR 681	17	4.82	4.77	
2010	Spring	NUTR 681	19	4.55	4.55	
2011	Fall	ANSC 604	8	3.78	4.75	
2011	Spring	ANSC 623*	10	4.04	4.69	
2011	Summer	ANSC 415/615	4	4.44		
2012	Fall	ANSC 604	11	4.03	4.65	
2012	Summer	ANSC 415/615	6	4.94	4.6	
2014	Fall	ANSC 604	5	4.71	4.72	
2015	Fall	ANSC 604	5	4.88	4.74	
2016	Winter	ANSC 489/689	10	—	—	—
2016	Fall	ANSC 604	7	3.94	4.8	

Year	Term	Course	Students	Average Scores**		
				Course	Subject	Level
2017	Fall	ANSC 604	2	4.38	4.66	4.75
2018	Fall	ANSC 604	4	4.96	4.66	4.73
2018	Spring	ANSC 691	1	5	4.68	4.64
2018	Summer	ANSC 415/615	1	5	4.65	5
2019	Fall	ANSC 604	5	4.96	4.62	4.82
2019	Spring	ANSC 623*	4	4.84	4.59	4.54
2020	Winter	ANSC 489/689	6	5.00	4.64	4.80

* Cross-listed with POSC 625. ** Average scores: COURSE is the mean response to this item from students in all sections of this course, SUBJECT is the mean response to this item from students in all courses in this subject, and LEVEL is the mean response to this item from students in all courses in this subject at this level, (e.g.100, 200).

Teaching Improvement Activities

- October 10, 2005. Workshop on "WebCT overview";
- December 13, 2005. Workshop on "Writing syllabi that engage and motivate students";
- May to July 2006. Distance Learning: SD 552. System Dynamics for Insight. The objective of this course is to help students appreciate and master system dynamics' unique way of using computer simulation models. The course provides tools and approaches for building and learning from models. The course covers the use of molecules of system dynamics structure to increase model building speed and reliability. In addition, the course covers recently developed eigenvalue-based techniques for analyzing models as well as more traditional approaches. Prerequisites: SD 550 System Dynamics Foundation: Managing Complexity and SD 551 Modeling and Experimental Analysis of Complex Problems;
- September 29, 2006; October 20, 2006; November 10, 2006; January 26, 2007; February 23, 2007; and March 23, 2007. Center for Teaching Excellence, Texas A&M University, College Station, TX, USA - Inspiration 101 - Faculty Teaching Academy;
- January 24, 26, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Microsoft Projects;
- February 12, 14, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Macromedia Dreamweaver I;
- February 19, 21, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Macromedia Dreamweaver II;
- June 18-19, 2007, Training Center at the Texas A&M University, College Station, TX, USA – Visio;
- June 19-20, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Cascading Style Sheets – CSS;
- January 30, 2008 and February 01, 2008, Training Center at the Texas A&M University, College Station, TX, USA - Photoshop Basic;
- February 12-13, 2008, Instructional Technology Services, College Station, TX – USA – Teaching with Technology Conference;
- June 12, 2008, Center for Employee Education, College Station, TX, USA – Creating Your Personal Web Page;

- June 19, 2008, Center for Employee Education, College Station, TX, USA – Creating Technology-Enhanced Presentations;
- February 11-12, 2009, Instructional Technology Services, College Station, TX – USA – Teaching with Technology Conference;
- January 14, 2010, Texas A&M University Supercomputing Facility, College Station, TX – USA – Introduction to Matlab computing;
- October 14, 2010, Instructional Technology Services, College Station, TX – USA – Embrace Conflict, Improve Your Effectiveness as a Faculty Member;

Undergraduate Student Involvement

- See Undergraduate Student Exchange Activities on page 31.
- Undergraduate student workers in the Ruminant Nutrition Laboratory
  - 2015-2016. Megan Helle
  - 2015-2016. Erin Posey
  - 2015-2016. Madelyn Wilson
  - 2016-2017. Cameron Childress
  - 2016-2017. Korrin Jorgensen
  - 2016-2017. Tara Liska
  - 2016-2017. Taylor Preston
  - 2016-2017. Kamryn Pursell
  - 2016-2017. Mariana Vargas
  - 2016-2017. Lindsay Woodcock
  - 2017-2019. Jordan Adams
  - 2017-2018. Daylon Drews
  - 2017. Helen Griffin
  - 2017-2018. Madeline Rivera
  - 2017. Lainey Wolf
  - 2017-2018. Dakota Zapalac
  - 2018-2019. Morgan Jackson
  - 2018. Ryan Yeatts
  - 2019. Kaylie Kirk
  - 2019. Adam Powell
  - 2019-2021. Lorelei Lahiere
  - 2019-2020. Kayli Crauthers
  - 2020. Christopher Johnson
- Animal Science Research (ANSC 291, 491, and 485)
  - Fall 18. Jordan Adams (491)
  - Spr19. Nicholas Free (491)
  - Spr19. Christopher Johnson (491)
  - Fall 19. Edgar Montoya (291)
  - Fall 19. Nicholas Free (485)
  - Fall 19. Madeline Rivera (485)
  - Spr 20. Nicholas Free (491)
  - Spr 20. Christopher Johnson (491)
  - Spr 20. Sydney Wilson (491)
  - Spr 21. Alexandra Smith (291)
  - Spr 21. Brianna Bazel (491)
  - Spr 21. Mary Ann Phan (291)
  - Spr 21. Noorjahan Mohamed (491)
  - Spr 21. Shaylan Wehner (491)
  - Sum 21. Lorelei Lahiere (491)
  - Sum 21. Jessica Khane Allen (491)
  - Fall 21. Lorelei Lahiere (491)
  - Fall 21. Jessica Khane Allen (491)
  - Fall 21. Aubree McMahon (491)

Graduate Student Involvement

Start	Defense	Name	University [1]	Degree	Field	Chair	Co-Chair	Member
2005	2006	Vasconcelos, Judson	TAMU	PhD	ANSC		X	
2005	2007	Bourg, Brandi	TAMU	MS	ANSC	X		

Start	Defense	Name	University [1]	Degree	Field	Chair	Co-Chair	Member
2005	2008	Ribeiro, Flavio	TAMU	PhD	ANSC		X	
2006	2006	Fernandes, Márcia	UNESP	PhD	ANSC			X
2006	2007	Chizzotti, Fernanda	UFV	PhD	ANSC			X
2006	2007	Chizzotti, Mário	UFV	PhD	ANSC			X
2006	2007	Guimarães, Vinícius	UFV	PhD	ANSC			X
2006	2007	McMeniman, Joe	TTU	PhD	ANSC			X
2006	2008	Gutiérrez, Hector	TAMU	PhD	ANSC			X
2007	2008	Bonilha, Sarah	USP	PhD	ANSC			X
2007	2008	Pina, Douglas	UFV	PhD	ANSC			X
2007	2009	Aguiar, André	TAMU	MS	ANSC	X		
2007	2009	Kruger, Wimberley	TAMU	PhD	ANSC			X
2007	2009	Pagán-Riestra, Suzika	TAMU	PhD	AGRO			X
2007	2010	Gomez, Robynne	TAMU	MS	ANSC			X
2007	2010	Paddock, Zachary	TAMU	PhD	NUTR			X
2007	2011	Bourg, Brandi	TAMU	PhD	ANSC	X		
2008	2009	Fernandes, Henrique	UFV	PhD	ANSC			X
2008	2009	Raggi, Thiago	TAMU	MS	WFSC			X
2008	2010	Allen, Carolyn	TAMU	MS	ANSC			X
2008	2010	Mendes, Egleu	TAMU	MS	ANSC		X	
2008	2010	Swiegers, Piet	UP	PhD	ANSC			X
2008	2011	Williams, Whitney	TAMU	MS	ANSC	X		
2008	—	Rakowitz, Lesley	TAMU	PhD	ANSC			X
2009	2009	Marcondes, Marcos	UFV	PhD	ANSC			X
2009	2010	Grafe, Richard	TAMU	MS	ANSC			X
2009	2011	Cordero, Viviana	TAMU	MS	ANSC			X
2009	2011	Turner, Benjamin	TAMUK	MS	ANSC			X
2009	2014	Alves, Bruna	TAMU	PhD	PREP			X
2009	—	Behrens, Jay	TAMU	MS	ANSC			X
2009	—	Parketon, Sarah	TAMU	MS	ANSC			X
2010	2010	Haffla, Aimee	TAMU	PhD	ANSC			X
2010	2011	Bailey, Jayton	TAMU	MS	ANSC			X
2010	2011	Moreno-Rajo, Jose	TAMU	MS	ANSC		X	X
2010	2011	Rugger, Rosana	USP	PhD	ANSC			X
2010	2013	Naumann, Harley	TAMU	PhD	AGRO		X	
2010	2013	Wiley, Leanne	TAMU	MS	ANSC	X		
2011	2012	de Paula, Nelcino	UFV	PhD	ANSC			X
2011	2013	Fonseca, Mozart	UFV	PhD	ANSC			X
2011	2014	Cardoso, Rodolfo	TAMU	PhD	PREP			X
2011	2015	Jackson, Kirby	TAMU	MS	ANSC			X
2012	2013	Louzada, Gilson	UFV	PhD	ANSC			X
2012	2014	Cavalcanti, Luigi	UFMG	PhD	ANSC			X
2012	2014	Ramirez, Justin	TAMU	MS	ANSC		X	
2012	2014	Turner, Benjamin	SDSU	PhD	ANSC			X

Start	Defense	Name	University [1]	Degree	Field	Chair	Co-Chair	Member
2013	2016	Zoller, Jennifer	TAMU	PhD	ANSC			X
2014	2015	Biase, Adriele	USP	PhD	ANSC			X
2014	2016	Klopatek, Sarah	TAMU	MS	ANSC		X	
2014	2016	Miller, Michael	TAMU	MS	ANSC			X
2014	2017	Smith, W. Brandon	TAMU	PhD	AGRO		X	
2014	2018	Crossland, Whitney	TAMU	PhD	ANSC	X		
2014	—	Gasca, Samantha	TAMU	PhD	ANSC			X
2014	—	Valdez, Raul	TAMU	PhD	ANSC			X
2015	2015	Cupples, Abbey	TAMU	MAG	ANSC	X		
2015	2017	Smith, Paul	TAMU	MS	ANSC			X
2015	2019	Norris, Aaron	TAMU	PhD	AGRO		X	
2016	2019	Delgadillo, Jose	TAMU	PhD	ANBR			X
2016	2019	Henderson, Hillary	TAMU	PhD	ANSC			X
2017	2019	Cagle, Caitlyn	TAMU	MS	ANSC	X		
2017	2019	Ferro, Mariane	UFMT	PhD	ANSC			X
2017	2019	Garcia Medina, Alejandra	CPG	MS	ANSC			X
2017	2019	Johnson, Jocelyn	TAMU	PhD	ANSC			X
2018	2019	Anaya, Tori	TAMU	MS	ANSC			X
2018	2019	Dos Reis, Barbara	TAMU	MS	ANSC			X
2018	2020	Berça, Andressa	UNESP	MS	ANSC			X
2018	2020	Dias Batista, Luis Fernando	TAMU	MS	ANSC	X		
2018		D'Souza, Genevieve	TAMU	PhD	ANSC	X		
2018		Rivera, Madeline	TAMU	PhD	ANSC	X		
2020	2021	Alhadas, Herlon	UFV	PhD	ANSC			X
2020	2021	Pacheco, Marcos	UFV	PhD	ANSC			X
2020		Dias Batista, Luis Fernando	TAMU	PhD	ANSC	X		
2020		O'Reilly, Keara	TAMU	PhD	ANSC			X
2020	2021	Adams, Jordan	OSU	MS	ANSC			X
2020		Hoffmann, Carly	TAMU	PhD	ANSC			X
2021		Berça, Andressa	UNESP	PhD	ANSC			X
2022		Adams, Jordan	TAMU	PhD	ANSC	X		

[1] CPG = Colégio de Postgraduados (Tabasco, Mexico), OSU = Oklahoma State University, SDSU = South Dakota State University, TAMU = Texas A&M University, TAMUK = Texas A&M University-Kingsville, TTU = Texas Tech University, UFMG = Universidade Federal de Minas Gerais, UFV = Universidade Federal de Viçosa, UNESP = Universidade do Estado de São Paulo, UP = University of Pretoria (South Africa), USP = Universidade de São Paulo, UFMT = Federal University of Mato Grosso. https://ogsdpss.tamu.edu/

Summary

Degree	Since the last faculty position as Chair, Co-Chair (co-Ch) and Member (Mbr) [1]											Career		
	Assistant				Associate				Professor					
	Chair	co-Ch	Mbr		Chair	co-Ch	Mbr		Chair	co-Ch	Mbr		Chair	co-Ch	Mbr
MAG	–	–	–		–	–	–		1	–	–		1	–	–
MS	3	1	8		1	2	2		2	1	7		6	4	17

Degree	Since the last faculty position as Chair, Co-Chair (co-Ch) and Member (Mbr) [1]											Career		
	Assistant				Associate				Professor					
	Chair	co-Ch	Mbr		Chair	co-Ch	Mbr		Chair	co-Ch	Mbr		Chair	co-Ch	Mbr
PhD	1	2	16		1	2	12		4	1	9		6	5	37
Total	**4**	**3**	**24**		**2**	**4**	**14**		**7**	**2**	**16**		**13**	**9**	**54**

[1] Assistant Professor: 2005 to 2010, Associate Professor: 2010 to 2015, Professor: September 1st, 2015.

Theses and Dissertations

Note: Underlined denotes chair/co-chair graduate students. * denotes visiting scholar

- **2006**
  1. Judson T. Vasconcelos. PhD. The *Use of Different Nutritional Strategies and Mathematical Models to Improve Production Efficiency, Profitability, and Carcass Quality of Feedlot Cattle.* (Texas A&M University, College Station, TX)
     - Judson had accepted a post-doctorate position at Texas Tech University, Lubbock, TX from September 2006 to March 2008. in April 2008, Judson accepted an Assistant Professor position at the University of Nebraska-Lincoln in Scottsbluff, NE. in January 2010, Judson accepted a Global Marketing Cattle Consultant position at Elanco Animal Health, a division of Eli Lilly. in September 2012, he accepted a Global Director, Beef Performance Technologies position at Merck Animal Health.
  2. Fernandes*, M. PhD. *Body Composition and Requirements of Energy, Protein and Macrominerals for Maintenance and Growth of ¾ Boer ¼ Saanen Kids*. (State University of Sao Paulo, Jaboticabal).
- **2007**
  3. Brandi M. Bourg. M.S. *Evaluations of a Mathematical Model in Predicting Intake of Growing and Finishing Cattle*. (Texas A&M University, College Station, TX).
     - Brandi has received an award at the Plains Nutrition Council for her work on growth modeling entitled "Evaluation of a mathematical model to estimate total feed required for pen-fed animals based on performance and diet information" in 2007. Since MS graduation, Brandi has started a PhD under the guidance of Dr. Tedeschi.
  4. Chizzotti*, F. H. M. PhD. *Non-Protein Nitrogen Levels and Different Corn Silage Hybrids in Beef Cattle Diets*. (Federal University of Viçosa, Viçosa, MG, Brazil).
  5. Chizzotti*, M. L. PhD. *Nutrient Requirements of Nellore Cattle, Purebred and Crossbred, of Different Sexual Groups*. (Federal University of Viçosa, Viçosa, MG, Brazil).
  6. Guimarães*, V. P. PhD. *Modeling a Dairy Goat Farm Using a System Dynamics Approach*. (Federal University of Viçosa, Viçosa, MG, Brazil).
  7. McMeniman, J. H. PhD. *Predicting Feed Intake and Performance By Feedlot Cattle*. (Texas Tech University, Lubbock, TX).
- **2008**
  8. Bonilha*, S. F. M. PhD. *Carcass Characteristics and Meat Quality Evaluation and Body Composition Prediction of Beef Cattle Genetic Groups Selected for Post-Weaning Weight*. (Universidade de São Paulo, Piracicaba, SP).
  9. Gutiérrez-Bañuelos, H. PhD. *Use of Novel Compounds to Reduce Methane Production and in Pre-Harvest Strategies to Decrease Foodborne Pathogens*. (Texas A&M University, College Station).

10. Pina*, D. S. PhD. *Nutritional Evaluation of Sugarcane Treated with Calcium Oxide at Different Times of Exposure to Cattle*. (Federal University of Viçosa, Viçosa, MG, Brazil). Professor at the University of Bahia.

- **2009**

11. Flavio Ribeiro. PhD. The *Relationship of Feed Efficiency with Performance, Ultrasound, Carcass and Non-Carcass Traits in Beef Cattle*. (Texas A&M University, College Station).
    - In January 2009, Flavio started on an Assistant Professor position at the Texas A&M University-Commerce in Commerce, TX. in January 2014, Flavio started on a Research Assistant position at the Prairie View A&M University in Praireview, TX. in 2018, Flávio accepted a position at PhytoBiotics.
12. André Aguiar. M.S. *Predicting Forage Nutritive Value Using An in Vitro Gas Production Technique and Dry Matter Intake of Grazing Animals Using N-Alkanes*. (Texas A&M University, College Station).
    - In January 2014, André started a Nutrition Sales Specialist at DeLaval in Batavia, NY. in 2018, André accepted a position at MWPMS in Longmont, CO.
13. Fernandes*, H. J. PhD. *Nutritional Evaluation and Study of Growth of Grazing Young Bulls Receiving Concentrate Supplementation with Different Protein Profiles*. (Federal University of Viçosa, Viçosa, MG, Brazil).
14. Krueger, W. PhD. *Understanding Beef Cattle Efficiency: I) Understanding Physiological and Digestive Factors Affecting Residual Feed Intake and II) Tannin Supplementation: Effects on Animal Performance, Fermentation, and Carcass Traits*. (Texas A&M University, College Station).
15. Marcondes*, M. PhD. *Nutrition Requirements E Prediction of Body Composition of Purebred and Crossbred Nellore*. (Federal University of Viçosa, Viçosa, MG, Brazil).
16. Pagan-Riestra, S. MS. *Phosphorus and Other Nutrient Disappearance From Plants Containing Condensed Tannins Using in Situ and Mobile Nylon Bag Techniques*. (Texas A&M University, College Station).
17. Raggi, T. MS. *Prebiotics Have Limited Effects on Nutrient Digestibility of a Soybean- Meal-Based Diet By Goldfish Carassius auratus*.(Texas A&M University, College Station, TX).

- **2010**

18. Whitney Williams. MS. *Determining Fiber and Protein Degradation Rates of Corn Milling (Co)Products and their Effects on Rumen Bacterial Populations and Lactating Dairy Cow Performance*. (Texas A&M University, College Station).
19. Allen, C. MS. *Influence of Nutrition During the Juvenile Period on Gene Expression within the Hypothalamic Arcuate Nucleus and on Age at Puberty in Heifers*. (thesis, Texas A&M University, College Station).
20. Gomez, R. MS. *Characterization of Feed Efficiency Traits and Relationships with Temperament, Serum Hormones and Serum Metabolites in Growing Brangus Heifers*. (Texas A&M University, College Station).
21. Grafe, R. MS. The *Impact of a Cross-Ventilated Dairy Barn on the Milk Production and Reproductive Efficiency in Dairy Cattle*. (Texas A&M University, College Station).
22. Mendes, E. D. M. MS. *Characterization of Feeding Behavior Traits and Associations with Performance and Feed Efficiency in Finishing Beef Cattle*. (Texas A&M University, College Station).
23. Paddock, Z. MS. *Feed Efficiency and Energy Expenditure in Growing Steers and Metaphylactic Treatment and Temperament Effects in Receiving Steers*. (Texas A&M University, College Station).

- **2011**

24. Brandi M. Bourg. PhD. *Determination of Energy Efficiency of Beef Cows Under Grazing Conditions Using a Mechanistic Model and the Evaluation of a Slow-Release Urea Product for Finishing Beef Cattle*. (Texas A&M University, College Station).
    - In September 2011, Brandi started on an Assistant Professor position at the Mississippi State University in Starkville, MS.
25. Cordero, V. MS. *Development of a Nutritional Model to Predict Digestible Energy Requirements of Broodmares Based on Body Condition Changes*. (Texas A&M University, College Station).
26. Bailey, J. C. MS. *Feed Intake and Feeding Behavior Associations with Performance and Feed Efficiency of Feedlot Cattle Fed a Corn-Based Diet*. (Texas A&M University, College Station).

- **2012**

27. de Paula*, N. F. PhD. *Evaluation of the Growth of Grazing Beef Cattle Under Different Planes of Nutrition*. (Federal University of Viçosa, Viçosa, MG, Brazil).

- **2013**

28. Leanne Wiley. MS. *An Exploration of Biological Mechanisms that Impact Intake and Feed Efficiency in the Grazing Animal*. (Texas A&M University, College Station).
    - In August 2013, Leanne accepted a Lecturer position at Sam Houston State University.
29. Harley Naumann. PhD. *Molecular Weight of Condensed Tannins from Warm-Season Perennial Legumes and Its Effect on Condensed Tannin Biological Activity*. (Texas A&M University, College Station).
    - In November 2013, Harley started on an Assistant Professor position at the University of Missouri in Columbia, MO.
30. Mozart Fonseca. PhD. *Evaluation and Development of Mathematical Models to Explain Beef Cattle Growth, and Its Relationship with Nutritional Requirements of F1 Nellore X Angus Bulls And Steers*. (Federal University of Viçosa, Viçosa, MG, Brazil).
    - In 2016, Mozart accepted an Assistant Professor position at the University of Nevada, Reno

- **2014**

31. Alves, B. R. C. PhD. *Nutritional Programming of Neuroendocrine Pathways Controlling the onset of Puberty in Heifers*. (Texas A&M University, College Station).
32. Cardoso, R. d. C. PhD. *Nutritional Programming of Puberty in Beef Heifers*. (Texas A&M University, College Station).
33. Turner, B. L. PhD. *to Plow or Not to Plow: An Investigation Into Land Use Changes and Consequences in the Northern Great Plains Using Systems Thinking and Dynamics*. (South Dakota State University, Brookings, SD).

- **2015**

34. Biase*, a. G. PhD. *Parametrização de Modelos Não-Lineares Usados na Agropecuária: Crescimento de Gado de Corte Cruzado e Produção de Gases in Vitro*. (Universidade de São Paulo, Piracicaba, SP, Brazil).
35. Jackson, K. S. MS. *Associations of Feeding Behavior Patterns with Inter-Animal Variation in Feed Efficiency and Pre-Clinical Responses to Infectious Disease in Beef Cattle*. (Texas A&M University, College Station, TX).

- **2016**

36. Sarah Klopatek. MS. *Ruminant Methanogenic Activity in the United States Beef Industry: Production and Sustainability*. (Texas A&M University, College Station).

37. Zoller, J. PhD. *Development of a Mathematical Model for Predicting Digestible Energy Intake to Meet Desired Body Condition Parameters in Exercising Horses*. (Texas A&M University, College Station, TX).

- **2017**

38. William Brandon Smith. PhD. *Impact of Dried Distillers' Grains with Solubles Supplementation of Cattle While Grazing Bermudagrass on the Plant-Animal Interface*. (Texas A&M University, College Station).
    - In September 2017, Brandon started on an Assistant Professor position at the Tarleton State University.
39. Smith, Paul S. MS. *Effects of Multi-Valent Vaccine Treatment and Temperament on Feed Intake, Performance, and Feeding Behavior Responses to BVD Viral Challenge in Beef Steers*. (Texas A&M University, College Station, TX).

- **2018**

40. Whitney Crossland. PhD. *Effect of Feed-Grade Antibiotics, Antibiotic Alternatives and the Impact of thermal Stress on the Ruminal Microbiome, Ruminal Fermentation, Feedlot Performance, and Feeding Behavior, and Carcass Characteristics of Beef Cattle*. (Texas A&M University, College Station).
    - In September 2018, Whitney accepted an Assistant Professor position at Texas Tech, Lubbock, TX.
41. Barbara Roqueto dos Reis*. MS. *Identification of Energetically Efficient Mature Cows and Characterization of Biological Differences Between Efficient and Inefficient Cows*. (University of Sao Paulo, FZEA/USP, Pirassununga, SP, Brazil).

- **2019**

42. Caitlyn Cagle. MS. *Evaluation of the Effects of Live Yeast on Rumen Parameters and in Situ Digestibilities in Beef Cattle Fed Growing and Finishing Diets*. (Texas A&M University, College Station).
    - In August 2019, Caitlyn accepted a position at the Hi-Pro Feeds in Comanche, TX.
43. Aaron Norris. PhD. *Evaluating the Effect of Quebracho Tannin Supplementation Upon Ruminant Production*. (Texas A&M University, College Station).
44. Jocelyn Johnson. PhD. *Application of Chemometrics to Predict Intake and Feed Efficiency Using Feeding Behavior Patterns in Growing Cattle*. (Texas A&M University, College Station).
45. Tori Lynn Anaya. MS. *Evaluating Marbling Activity Utilizing Metabolomics and Ultrasonography*. (Texas A&M University, College Station).
46. Jose Sebastian Delgadillo Liberona. PhD. *Investigation of Interactions Impacting Genetic Parameter Estimation and Genetic Merit Predictions in Beef Cattle*. (Texas A&M University, College Station).

- **2020**

47. Luiz Fernando Dias Batista. MS. *Utilization of Natural Feed Additives to Optimize Rumen Efficiency in High-Roughage Diets*. (Texas A&M University, College Station).

Post-Doctoral Mentoring

1. Dr. Ricardo A. M. Vieira (March 2007 to March 2008) - Visiting scholar from the State University of the North Fluminense, Campos, RJ, Brazil.

2. Dr. Henrique Fernandes (July 2008 to December 2008) – Visiting scholar from the State University of Mato Grosso, Campo Grande, MS, Brazil.
3. Dr. Alberto Atzori (January 2011 to August 2011) - Visiting scholar from the University of Sassari, Sassari, Italy.
4. Dr. Dulciene Karla Andrade (August 2011 to July 2012) – Visiting scholar from the Federal Rural University of Pernambuco, Pernambuco, Brazil.
5. Dr. Marco Bomfim (August 2011 to July 2012) – Visiting scholar from the EMBRAPA Sheep and Goats Research Center, Sobral, Ceará, Brazil. (EMBRAPA Fellowship)
6. Dr. Luis Vargas (July 2012 to June 2013) – Visiting scholar from the Colegio de Postgraduados, Campus Cárdenas, Tabasco, Mexico.
7. Dr. Mozart Fonseca (July 2013 to July 2016) – Post-doctorate at the Texas A&M University, College Station, TX.
8. Dr. Trung Vuong (August 2014 to November 2014) – Research scholar from the Research Institute in Ho Chi Minh City, Vietnam. (Borlaug Fellowship).
9. Dr. Ben Turner (July 2014 to July 2015) – Post-doctorate at the New Mexico State University in collaboration with Texas A&M University.
10. Dr. Damarla Bala Venkata Ramana (August 2015 to November 2015) – Research scholar from the Central Research Institute for Dryland Agriculture, Hyderabad, India. (Borlaug Fellowship).
11. Dr. Abu Sadeque Md. Selim (February 2016 to April 2016) – Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh. (Borlaug Fellowship)
12. Dr. Amélia Almeida (February 2016 to December 2016) – Visiting Scholar from the State University of São Paulo, Jaboticabal, Brazil.
13. Dr. Antonello Cannas (March 2016 to December 2016) – Visiting scholar from the University of Sassari, Italy.
14. Dr. Thaysa Santos Silva (March 2018 to October 2018) – Visiting scholar from the University of Sao Paulo/FZEA, Pirassununga, SP, Brazil.
15. Dr. Hector Menendez (June 2018 to present) – Post-doctorate at the Texas A&M University, College Station, TX.
16. Dr. Sarita Gallo (July 2018 to August 2019) – Visiting scholar from the University of Sao Paulo, FZEA, Pirassununga, SP, Brazil.
17. Dr. Camilla Deveaux (January 2020 to September 2020) – Visiting scholar from the Institute of Zootechnia, Sertãozinho, SP, Brazil.
18. Dr. Seongwon Seo (January 2020 to present) – Visiting scholar from the Chungnam National University, Daejeon, South Korea.
19. Dr. Karun Kanyiamattam (October 2020 to present) – Post-doctorate at the Texas A&M University, College Station, TX.

Seminar and Guest Lectures

Intercollegiate Faculty of Nutrition (IFN) - Spring 2006 – Using Mathematical Nutrition Models in Cattle Production.

ANSC 303 – Principles of Animal Nutrition. A scientific approach to nutritional roles of water, carbohydrates, proteins, lipids, minerals, vitamins, and other dietary components; emphasis on the comparative aspects of gastrointestinal tracts and digestion, absorption, and metabolism of nutrients. Prerequisites: CHEM 222, 227, or equivalent. Cross-listed with NUTR 303. I lectured ten classes in Spring 2006.

DASC 418 – Feeding and Management of Dairy Cattle. Dairy farm management; feeding and care of the dairy herd; raising calves for dairy replacements and for beef; developing dairy heifers; care of dry and fresh cows; optimum return rations for milk production; disease control; forage handling and storage; buildings and related topics. Prerequisites: ANSC 318; DASC 202; DASC 400 also be taken concurrently or with the approval of the instructor. I lectured 4 classes in 2006.

ANSC 318 – Feeds and Feeding. Characteristics of feedstuffs used in livestock enterprises; manual and computer ration formulation procedures and life cycle nutritional management of beef, swine, sheep, dairy, horses, fish and pets; methods of grain, protein supplement and forage processing and evaluation; commercial and on-the-farm feed mixing methods and feed control laws. Prerequisite: ANSC 303. I lectured 1 class in 2006.

ANSC 602 – Energetics of Metabolism and Growth. Invited lectures on Fermentation Losses: Methane, Comparative Slaughter Technique, and Energy Systems taught in Spring 2014, 2016, 2018.

VI. Research

Program Statement

The complexity of nutrient management planning in reducing nutrient (e.g. P, N) and particulate matter losses from concentrated animal feeding operations requires meticulous, organized, and integrated tools that facilitate the development of comprehensive nutrient management plans to meet federal and state recommendations. Concomitantly, the identification of efficient animals is important to ensure nutrients are used efficiently and environmental pollution is minimized. The development of mathematical models as decision support systems to assist producers, farmers, and consultants to ensure that animal requirements are met but not exceeded requires careful monitoring. This is known as *precision feeding*, matching animal production levels with the quality of the available feeds and nutrients.

Major Accomplishments

The proper implementation of precision feeding technique includes key critical components, which are the focus of my research:

- Accurate description and characterization of feeds. This step is important to account for more variation of the nutritive value; development of procedures for characterization of feeds that are easy to implement in commercial laboratories, and adoption of techniques to minimize inputs needed to characterize feeds. Dr. Tedeschi's laboratory is affiliated to the Feed Analysis Consortium, Inc., which is dedicated to the advancement of feed analysis and nutritional modeling basically by guiding commercial laboratories to standardize analytical procedures. Dr. Tedeschi built a continuous, computerized, fermentation chamber to measure the kinetics of anaerobic degradation of carbohydrates and have future plans to enhance it by measuring end-products of fermentation (volatile fatty acids and methane) and protein disappearance continuously. This chamber is being used to develop new standards of feed quality (mainly forages) for Southern regions.
- Accurate accountability of energy and nutrient supplied by feeds and required by animals: the development of dynamic, mechanistic models to more accurately describe the kinetics of ruminal fermentation is needed to better synchronize the availability of energy and other nutrients in the rumen, maximizing microbial growth, and efficiency of fermentation. Dr. Tedeschi has collaborated on the development of submodels of the *Cornell Net Carbohydrate and Protein System* (**CNCPS**), which is used in the National Research Council Nutrient Requirement for Beef Cattle (1996 and 2000), and the *Small Ruminant Nutrition System* (**SRNS**), which is used in the National Research Council Nutrient Requirement for Small Ruminants (2007). Dr. Tedeschi's focus in this topic is the reengineering and development of a more comprehensive mechanistic, dynamic model (*Ruminant Nutrition System*, **RNS**) to include recent advances in modeling (object-oriented programming) and ruminant nutrition (end-products of fermentation estimation, redesigned bacteria and protozoa submodel, and up-to-date animal requirements for energy and nutrients) for several species (e.g., cattle, sheep, and goats) in a redesigned platform. More information can be obtained at http://nutritionmodels.tamu.edu.
- Accurate predictions of energy and nutrient requirements by post-weaning animals: improvement of the *Cornell/Cattle Value Discovery System* (**CVDS**) to more accurately predict nutrient requirements of growing animals is important in developing individual animal management strategies to assist the allocation of animals with similar requirements (biotypes, feeding behavior, and feed efficiency) to a common harvest point (USDA grade low Choice) and also for genetic selection purposes. The CVDS has been used in the US beef industry, particularly by two Texas companies: Performance Cattle Company, LLC, http://performancecattle.com and Micro Beef Technologies, http://www.microbeef.com to manage feedlot animals to increase the profitability of feedyard operations.
- Accurate prediction of energy and nutrient requirements of cow/calf operations: the beef cattle seed stock industry in the USA is searching for ways to select for improved beef cow

efficiency to improve their competitiveness and profitability. Dr. Tedeschi's has developed a beef cow/calf model to identify differences in efficiency among beef cows. A project is currently underway with King Ranch, TX to apply this technology in their production situation to select for efficient cows. Future work in this topic includes improvements in the modeling of body condition score changes and its impact in bioenergetics of the cow, forage intake by the calves under different forage quality, and evaluation of efficiency ranking between cows and their progeny.

- Mathematical model adequacy: the development and application of models are essential in several branches of the scientific research domain. Notably, predictive models are used to estimate the outcomes of experiments that cannot be practically (or ethically) conducted, directly measured, are cost-prohibitive, or simply because there is plenty of available data and the collection of new data is neither justifiable nor acceptable. Even though models are generally accepted by the scientific community, the identification of their adequacy for predictive purposes is extremely important in building confidence and acceptance of the predictions in broader situations. Nonetheless, most evaluations are superficial and provide little or no information regarding the ability of a model to predict future outcomes. Dr. Tedeschi has worked on unbiased evaluation methods of mathematical models and he has developed computer software for this purpose, which has been used worldwide (http://nutritionmodels.com/mes.html).

Research project

Hatch Project # H-9123. "Precision feeding and mathematical modeling to increase profitability and to reduce environmental impacts of the beef and dairy cattle industries". Duration: September 2005 to September 2010. Extended until September 2011.

Hatch Project # H-9123 (Revision). "Development of the Ruminant Nutrition System (RNS) to improve feed management and to reduce the nutrient release into the environment". Duration: September 2011 to September 2016. Extended until September 2017.

Hatch Project # H-9123 (Revision). "Development of Mathematical Nutrition Models to Assist with Smart Farming and Sustainable Production". Duration: May 2018 to May 2023.

Research Improvement Activities

- March 22, 2006. Office of Proposal Development. Competing for funds at NSF. Presentation and faculty panel discussion on pursuing research funding at NSF;
- October 17, 2006, Texas SBIR/STTR Conference 2006, George Bush Presidential Library and Conference Center, College Station, TX;

- January 24, 26, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Microsoft Projects;
- February 12, 14, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Macromedia Dreamweaver I;
- February 19, 21, 2007, Training Center at the Texas A&M University, College Station, TX, USA - Macromedia Dreamweaver II;
- May 17, 2007, Office of Proposal Development at the Texas A&M University, College Station, TX, USA - Craft of Grant Writing Seminar for Research Investigators;
- June 29, 2007, Texas Agricultural Experiment Station. BioEnergy Workshop, College Station, TX;
- August 13-17, 2007, Workshop on "2007 Systems Approach for Natural Resource Problem Solving", Kingsville, TX;
- March 3-5, 2008, Anylogic, Orlando, FL - Anylogic 6 Training;
- March 12-15, 2008, Imagine That Inc., Webinar, What's new in ExtendSim 7? Overview, Item Library, and Value Library; Rate Library and 3D Animation; Equations and Database; and New Tools for Developers;
- April 24, 2008, Dean of Faculties Office, College Station, TX - Demystifying the Tenure and Promotion Process;
- April 30, May 1, 2008, Training Center at the Texas A&M University, College Station, TX, USA - Adobe Dreamweaver CS3 – Essentials;
- February 3 and 5, 2009, Texas A&M University Supercomputing Facility, College Station, TX, USA – Introduction to Supercomputing on HYDRA (IBM p5-575 Cluster);
- February 10, 11, and 12, 2009, Texas A&M University Supercomputing Facility, College Station, TX, USA – Introduction to UNIX;
- September 21-23, 2009, Texas A&M University Supercomputing Facility, College Station, TX – USA – Introduction to Unix/Linux;
- September 28, 29, 2009, Texas A&M University Supercomputing Facility, College Station, TX – USA – Introduction to supercomputing on Hydra;
- October 5-7, 2009, Texas A&M University Supercomputing Facility, College Station, TX – USA - Introduction to Parallelization with MPI;
- October 12-14, 2009, Texas A&M University Supercomputing Facility, College Station, TX – USA - Introduction to Parallelization with OpenMP;
- October 4-7, 2010, Texas A&M University Supercomputing Facility, College Station, TX – USA - Introduction to PERL;
- November 8-10, 2010, Texas A&M University Office of the Provost for Research, College Station, TX – Federal Research Priorities and Budget Update for FY11 Webinar.

Technology Transfer

The following activities are evidence of the research and technology that Dr. Tedeschi has collaborated and developed is being utilized by academia, industry, and producers.

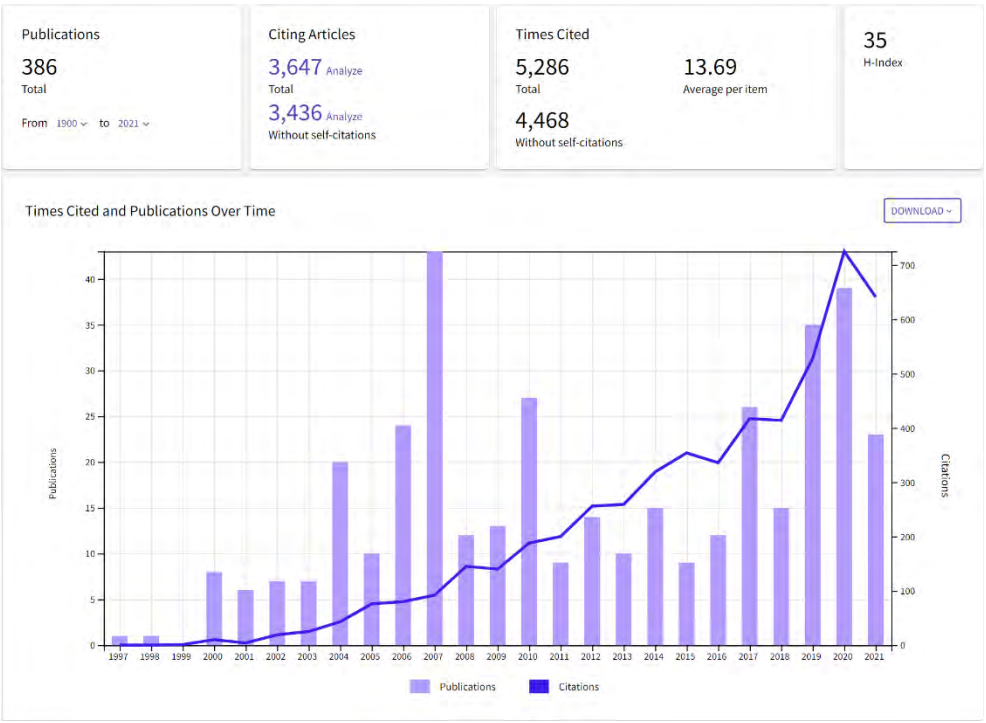
- Mathematical Nutrition Models web page (http://nutritionmodels.tamu.edu) has been visited more than 73,635 times (Aug 3, 2018) since its conception in February 2006.
- Most cited article: **Tedeschi, L. O.** 2006. Assessment of the adequacy of mathematical models. Ag. Syst. 89:255-247. **Impact Factor of 2.907.**

  - Science Direct Top 25 Hottest Articles: Jan to Mar, 2006 (ranked 7th), Apr to Jun, 2006 (ranked 3rd), and Jul to Sep, 2006 (ranked 17th)
    - http://top25.sciencedirect.com/?journal_id=0308521X
  - Most cited Agricultural Systems article
    - http://www.journals.elsevier.com/agricultural-systems/most-cited-articles
- Performance Cattle Company, LLC, has developed a cattle classification and sorting system (CCSS) based on the software CVDS. At present, Performance Cattle Company is being used in several feedyards, including Cactus Feeders and Five Rivers.
  - "The Cattle Classification and Sorting System™ (CCSS™), provided by Performance Cattle Company, LLC (Amarillo, Texas), is a science-based system designed to reduce diversity in cattle feeding groups to return additional value when cattle are harvested. The system does not require special identification of cattle or a large investment in equipment, facilities, or resources to operate and manage the system. The CCSS™ is simple to use and is easily installed in existing feedyard operations. To achieve this, cattle are sorted using individual maturity and growth characteristics but are managed by pen rather than individually. During normal processing, cattle are individually weighed, and external dimensions are measured and then an optimum target finish weight is projected. Using a published and validated growth model from Cornell University, daily growth and the number of days to reach the target finish weight is projected for each animal. Cattle are then grouped and sorted into pens based on the number of days to reach their target finish weight." (http://www.performancecattle.com/html/ccss_overview.html).
- Micro Beef Technologies has developed ACCU-TRAC© Electronic Cattle Marketing (ECM) to manage cattle individually.
  - "…Rather than eyeballing and just guessing about animal performance, beef producers can use objective criteria to make management decisions. ECM® combines multiple objective measurements on each -- such as weight, ultrasound for internal tissue characteristics like backfat thickness, and video imaging for external dimensions, along with many other data -- for optimum individual profit sorting, management, and marketing whether at the feedyard or the ranch." (http://www.microbeef.com/accutrac_ecm/index.html).

Citation Index

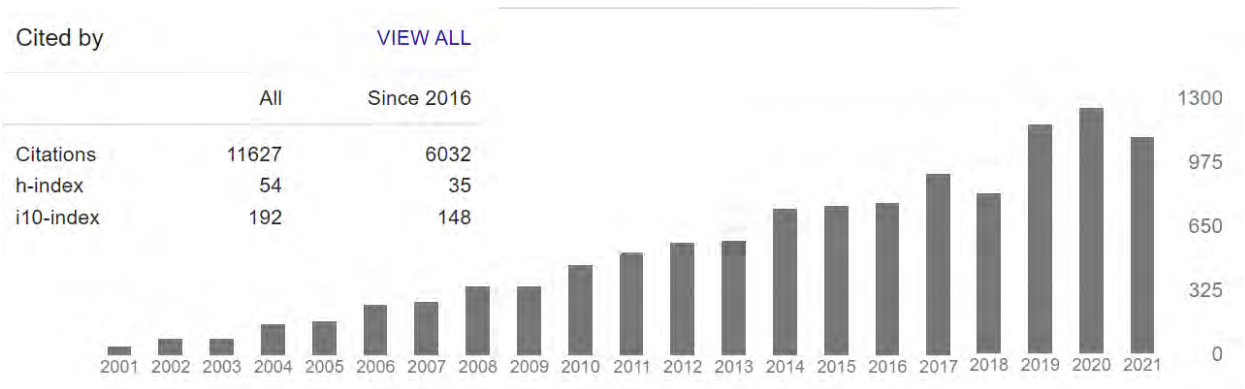
ISI Web of Knowledge

- https://publons.com/researcher/C-4395-2016
- In November 2021, the citation report indicated that Dr. Tedeschi's publication record (Tedeschi LO) for all databases was cited 5,286 times by peers, with an average of 14 citations per item. The Figure below shows the evolution of annual citation since 1999 (http://apps.webofknowledge.com). **Dr. Tedeschi's research (publication) has achieved an h-index of 35**.



Google Scholar

- Google Scholar (https://scholar.google.com/citations?user=uczywzIAAAAJ&hl=en) indicated that in October 2021 Dr. Tedeschi's publication record achieved **11,627 citations with an H-index of 54 and I10-index of 192**.



Highly cited publications based on ISI Web of Knowledge

#	Year	References	× Cited
1	2004	Fox, DG; Tedeschi, LO; Tylutki, TP; Russell, JB; Van Amburgh, ME; Chase, LE; Pell, AN; Overton, TR. 'The Cornell Net Carbohydrate and Protein System model for evaluating herd nutrition and nutrient excretion'. ANIMAL FEED SCIENCE AND TECHNOLOGY.	420

#	Year	References	× Cited
2	2006	Tedeschi, LO. 'Assessment of the adequacy of mathematical models'. AGRICULTURAL SYSTEMS.	358
3	2004	Cannas, A; Tedeschi, LO; Fox, DG; Pell, AN; Van Soest, PJ. 'A mechanistic model for predicting the nutrient requirements and feed biological values for sheep'. JOURNAL OF ANIMAL SCIENCE.	185
4	2008	Tylutki, T. P.; Fox, D. G.; Durbal, V. M.; Tedeschi, L. O.; Russell, J. B.; Van Amburgh, M. E.; Overton, T. R.; Chase, L. E.; Pell, A. N.. 'Cornell Net Carbohydrate and Protein System: A model for precision feeding of dairy cattle'. ANIMAL FEED SCIENCE AND TECHNOLOGY.	155
5	2008	Chizzotti, Mario Luiz; Valadares Filho, Sebastido de Campos; Diniz Valadares, Rilene Ferreira; Martins Chizzotti, Fernanda Helena; Tedeschi, Luis Orlindo. 'Determination of creatinine excretion and evaluation of spot urine sampling in Holstein cattle'. LIVESTOCK SCIENCE.	143
6	2003	Tedeschi, LO; Fox, DG; Tylutki, TP. 'Potential environmental benefits of ionophores in ruminant diets'. JOURNAL OF ENVIRONMENTAL QUALITY.	104
7	2004	Tedeschi, LO; Fox, DG; Guiroy, PJ. 'A decision support system to improve individual cattle management. 1. A mechanistic, dynamic model for animal growth'. AGRICULTURAL SYSTEMS.	94
8	2010	Tedeschi, L. O.; Cannas, A.; Fox, D. G.. 'A nutrition mathematical model to account for dietary supply and requirements of energy and other nutrients for domesticated small ruminants: The development and evaluation of the Small Ruminant Nutrition System'. SMALL RUMINANT RESEARCH.	91
9	2007	Lanzas, C.; Sniffen, C. J.; Seo, S.; Tedeschi, L. O.; Fox, D. G.. 'A revised CNCPS feed carbohydrate fractionation scheme for formulating rations for ruminants'. ANIMAL FEED SCIENCE AND TECHNOLOGY.	83
10	2001	Ruiz, R; Albrecht, GL; Tedeschi, LO; Jarvis, G; Russell, JB; Fox, DG. 'Effect of monensin on the performance and nitrogen utilization of lactating dairy cows consuming fresh forage'. JOURNAL OF DAIRY SCIENCE.	81
11	2009	Lancaster, P. A.; Carstens, G. E.; Ribeiro, F. R. B.; Tedeschi, L. O.; Crews, D. H., Jr.. 'Characterization of feed efficiency traits and relationships with feeding behavior and ultrasound carcass traits in growing bulls'. JOURNAL OF ANIMAL SCIENCE.	76
12	2002	Tedeschi, LO; Boin, C; Fox, DG; Leme, PR; Alleoni, GF; Lanna, DPD. 'Energy requirement for maintenance and growth of Nellore bulls and steers fed high-forage diets'. JOURNAL OF ANIMAL SCIENCE.	69
13	2009	Lancaster, P. A.; Carstens, G. E.; Crews, D. H., Jr.; Welsh, T. H., Jr.; Forbes, T. D. A.; Forrest, D. W.; Tedeschi, L. O.; Randel, R. D.; Rouquette, F. M.. 'Phenotypic and genetic relationships of residual feed intake with performance and ultrasound carcass traits in Brangus heifers'. JOURNAL OF ANIMAL SCIENCE.	63
14	2000	Tedeschi, LO; Fox, DG; Russell, JB. 'Accounting for the effects of a ruminal nitrogen deficiency within the structure of the Cornell Net Carbohydrate and Protein System'. JOURNAL OF ANIMAL SCIENCE.	63
15	2007	Fernandes, M. H. M. R.; Resende, K. T.; Tedeschi, L. O.; Fernandes, J. S.; Silva, H. M.; Carstens, G. E.; Berchielli, T. T.; Teixeira, I. A. M. A.; Akinaga, L.. 'Energy and protein requirements for maintenance and growth of Boer crossbred kids'. JOURNAL OF ANIMAL SCIENCE.	62
16	2002	Guiroy, PJ; Tedeschi, LO; Fox, DG; Hutcheson, JP. 'The effects of implant strategy on finished body weight of beef cattle'. JOURNAL OF ANIMAL SCIENCE.	59
17	2008	Chizzotti, M. L.; Tedeschi, L. O.; Valadares-Filho, S. C.. 'A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle'. JOURNAL OF ANIMAL SCIENCE.	56
18	2001	Guiroy, PJ; Fox, DG; Tedeschi, LO; Baker, MJ; Cravey, MD. 'Predicting individual feed requirements of cattle fed in groups'. JOURNAL OF ANIMAL SCIENCE.	56
19	2014	McCann, Joshua C.; Wiley, Leanne M.; Forbes, T. David; Rouquette, Francis M., Jr.; Tedeschi, Luis O.. 'Relationship between the Rumen Microbiome and Residual Feed Intake-Efficiency of Brahman Bulls Stocked on Bermudagrass Pastures'. PLOS ONE.	55
20	2007	Chizzotti, M. L.; Valadares Filho, S. C.; Tedeschi, L. O.; Chizzotti, F. H. M.; Carstens, G. E.. 'Energy and protein requirements for growth and maintenance of F-1 Nellore x Red Angus bulls, steers, and heifers'. JOURNAL OF ANIMAL SCIENCE.	55

#	Year	References	× Cited
21	2017	Naumann, Harley D.; Tedeschi, Luis O.; Zeller, Wayne E.; Huntley, Nichole F.. 'The role of condensed tannins in ruminant animal production: advances, limitations and future directions'. REVISTA BRASILEIRA DE ZOOTECNIA-BRAZILIAN JOURNAL OF ANIMAL SCIENCE.	52
22	2006	Seo, S.; Tedeschi, L. O.; Lanzas, C.; Schwab, C. G.; Fox, D. G.. 'Development and evaluation of empirical equations to predict feed passage rate in cattle'. ANIMAL FEED SCIENCE AND TECHNOLOGY.	52
23	2010	Krueger, N. A.; Anderson, R. C.; Tedeschi, L. O.; Callaway, T. R.; Edrington, T. S.; Nisbet, D. J.. 'Evaluation of feeding glycerol on free-fatty acid production and fermentation kinetics of mixed ruminal microbes in vitro'. BIORESOURCE TECHNOLOGY.	50
24	2003	de Capdeville, G; Beer, SV; Watkins, CB; Wilson, CL; Tedeschi, LO; Aist, JR. 'Pre- and post-harvest harpin treatments of apples induce resistance to blue mold'. PLANT DISEASE.	45
25	2002	Tedeschi, Luís Orlindo; Fox, Danny Gene; Pell, Alice N.; Lanna, Dante Pazzanese Duarte; Boin, Celso. 'Development and evaluation of a tropical feed library for the Cornell Net Carbohydrate and Rrotein System model. Desenvolvimento e avaliação de uma biblioteca de alimentos tropicais para o modelo Sistema de Carboidrato e Proteína Líquidos da Universidade de Cornell'. Scientia Agricola.	43
26	2011	Mendes, E. D. M.; Carstens, G. E.; Tedeschi, L. O.; Pinchak, W. E.; Friend, T. H.. 'Validation of a system for monitoring feeding behavior in beef cattle'. JOURNAL OF ANIMAL SCIENCE.	42
27	2010	Kelzer, J. M.; Kononoff, P. J.; Tedeschi, L. O.; Jenkins, T. C.; Karges, K.; Gibson, M. L.. 'Evaluation of protein fractionation and ruminal and intestinal digestibility of corn milling co-products'. JOURNAL OF DAIRY SCIENCE.	42
28	2008	Tedeschi, L. O.; Chalupa, W.; Janczewski, E.; Fox, D. G.; Sniffen, C.; Munson, R.; Kononoff, P. J.; Boston, R.. 'Evaluation and application of the CPM dairy nutrition model'. JOURNAL OF AGRICULTURAL SCIENCE.	38
29	2000	Leme, PR; Boin, C; Margarido, RCC; Tedeschi, LO; Hausknecht, JCOV; Alleoni, GF; Luchiari, A. 'Growth performance in feedlot and carcass characteristics of beef cattle from several crossbreds slaughtered in three body weight ranges'. REVISTA BRASILEIRA DE ZOOTECNIA-BRAZILIAN JOURNAL OF ANIMAL SCIENCE.	38
30	2014	Naumann, H. D.; Hagerman, A. E.; Lambert, B. D.; Muir, J. P.; Tedeschi, L. O.; Kothmann, M. M.. 'Molecular weight and protein-precipitating ability of condensed tannins from warm-season perennial legumes'. JOURNAL OF PLANT INTERACTIONS.	37
31	2002	Tedeschi, LO; Baker, MJ; Ketchen, DJ; Fox, DG. 'Performance of growing and finishing cattle supplemented with a slow-release urea product and urea'. CANADIAN JOURNAL OF ANIMAL SCIENCE.	37
32	2014	Cardoso, R. C.; Alves, B. R. C.; Prezotto, L. D.; Thorson, J. F.; Tedeschi, L. O.; Keisler, D. H.; Park, C. S.; Amstalden, M.; Williams, G. L.. 'Use of a stair-step compensatory gain nutritional regimen to program the onset of puberty in beef heifers'. JOURNAL OF ANIMAL SCIENCE.	36
33	2002	Ruiz, R; Tedeschi, LO; Marini, JC; Fox, DG; Pell, AN; Jarvis, G; Russell, JB. 'The effect of a ruminal nitrogen (N) deficiency in dairy cows: Evaluation of the cornell net carbohydrate and. protein system ruminal N deficiency adjustment'. JOURNAL OF DAIRY SCIENCE.	36
34	2009	Pina, D. S.; Valadares Filho, S. C.; Tedeschi, L. O.; Barbosa, A. M.; Valadares, R. F. D.. 'Influence of different levels of concentrate and ruminally undegraded protein on digestive variables in beef heifers'. JOURNAL OF ANIMAL SCIENCE.	35

VII. Service

Professional Improvements and Activities

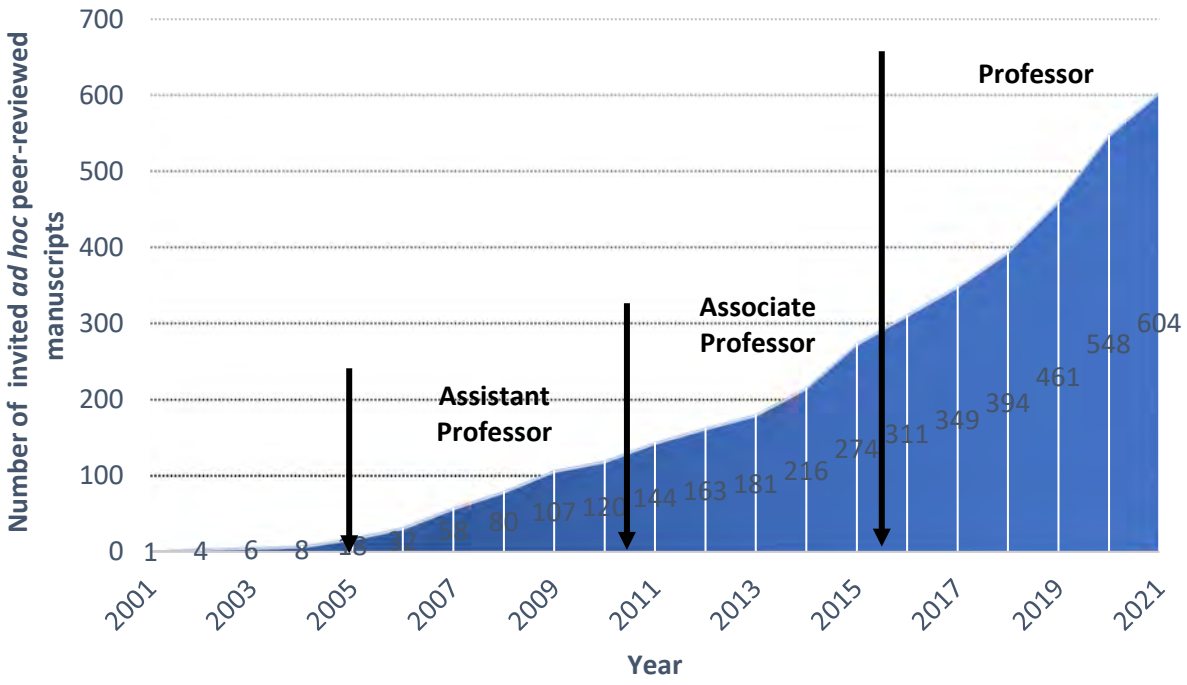
Organization and association memberships

Organization/Association	Role	Date
Feed Analysis Consortium	Member	2003 to 2008
ASA - American Society of Agronomy: www.agronomy.org CSSA - Crop Science Society of America: https://www.crops.org/ SSSA - Soil Science Society of America: https://www.soils.org/	Member	2014 to 2017
ASAS - American Society of Animal Science: https://asas.org/	Member	1995 to present
SBZ - Brazilian Society of Animal Science: http://www.sbz.org.br/	Member	1997 to present
ARPAS - American Registry of Professional Animal Scientists: http://www.arpas.org/	Member	2004 to present
SDS - System Dynamics Society: http://www.systemdynamics.org/	Member	2005 to present
ADSA - American Dairy Science Association: http://adsa.org/	Member	2013 to 2019

Invited Ad hoc Peer-Reviewer

- Since 2001

Journals	Number
Journal of Animal Science	94
Animal Feed Science and Technology	62
Journal of Dairy Science	46
Animal	33
Livestock Science	21
Other Journals	303
Total	**559**



Associate Editor of Journals (reversed chronological order)

- 2020-**present**. Editorial Board of Applied Animal Science (AAS) as an expert in Forages and Feeds (http://www.appliedanimalscience.org)
- 2019-**present**. Associate Editor of Peer Community in Animal Science (PCI Animal Science; https://animsci.peercommunityin.org/)

Departmental Services (reversed chronological order)

- 2020-2021. Search Advisory Committee for the Associate Professor/Professor of Beef Cattle Production Systems at the Texas A&M AgriLife Research and Extension Center at Beeville (Dr. Jamie Foster, chair)
- 2020-2021. Search Advisory Committee for the Vice-Chancellor and Dean Postdoctoral Fellowship Program on Artificial Intelligence (Dr. Tedeschi, chair)
- 2020-2021. Search Advisory Committee for the Assistant Professor of Ruminant Nutrition at the Texas A&M AgriLife Research and Extension Center at Amarillo (Dr. Jason Smith, chair)
- 2019-**present**. Quantifiable Animal Performance Area of Excellence (Dr. Tedeschi, chair)
- 2018-2021. Dr. Leslie Frenzel Mentoring Committee (Drs. Tedeschi and Ing, chairs)
- 2018-**present**. Dr. Ky Pohler's Mentoring Committee (Dr. Welsh, chair)
- 2017-**present**. Dr. Rodolfo Cardoso's Mentoring Committee (Dr. Welsh, chair)
- 2017-2019. Graduate Program Committee (Dr. Bazer, chair)
- 2017-2018. Faculty Advisory Committee (Dr. Tedeschi, chair)
    - Projects: Visions for ANSC, Differential Tuition Funds, Facilities Renovation, 2018 Faculty Retreat, Areas of Excellence.
- 2017-2018. Dairy Extension Search Committee (Dr. Jordan, chair)
- 2016-2017. Dairy Extension Search Committee (Dr. Jordan, chair)

- 2015. Animal Welfare/Wellbeing Search Committee (Dr. Savell, chair)
- 2012-2016. Sustainability committee (Dr. Savell, chair)
- 2012-2016. Graduate curriculum committee (Dr. Forrest, chair)
- 2012-2016. Develop web-based focus area committee (Dr. Hale, chair)
- 2011. Edwards Teaching Award Committee
- 2011-2012. Beef Cow Efficiency Committee (Kenny Eng)
- 2011. Korea-US International Joint Symposium.
- 2011-2018. Feed the Future Committee.
- 2010-2018. International Agriculture Certificate Committee.
- 2009. Mentoring Committee of Jim McDonald.
- 2008-2012. Serving on the Laboratory Oversight Forage Sub-Committee.
- 2006. Served on the Ruminant Nutrition Position Search Committee.
- 2005-2006. Served on the TAMU Beef Farm Committee.

College Services (reversed chronological order)

- 2021. Texas A&M COALS Strategic Plan (Dr. Seth Murray, chair)
- 2021. Texas A&M AgriLife Strategic Plan (Dr. Susan Ballabina, chair)
- 2021. COALS Promotion and Tenure Committee (Dr. Akiwa, chair)
- 2020. Vice-Chancellor Award in Excellence
- 2020. COALS Promotion and Tenure Committee (Dr. Smith, chair)
- 2017. Willie Mae Harris Fellowship (Dr. Reed, chair)
- 2016. Faculty Development Leave evaluation committee (Dr. Reed, chair)
- 2015. Faculty Development Leave evaluation committee (Dr. Reed, chair)

University Services (reversed chronological order)

- 2018. Diversity Fellowship for Interdisciplinary Program Committee (Dr. Moreira, chair)
- 2017. Diversity Fellowship for Interdisciplinary Program Committee (Dr. Moreira, chair)
- 2016. Diversity Fellowship Committee (Dr. Moreira, chair)
- 2015. Merit Fellowship (Dr. Moreira, chair)

Extramural Services (reversed chonological order)

- 2021-**present**. Technical Advisory Group (TAG) on Methane. Food and Agriculture Organization of the United Nations. Quantification of Methane Emissions (Dr. Tedeschi, chair)
- 2021-**present**. Member of the Coordinating Committee of the National Animal Nutrition Program (Dr. Miller, chair)
- 2021-**present**. Member of the Modeling Committee of the National Animal Nutrition Program (Drs. White, chair)
- 2012-2020. Member of the Modeling Committee of the National Animal Nutrition Program (Drs. Hannigan, chair)

Service Improvement Activities

- September 29, 2020. Office of the Dean of Faculties, College Station, TX, USA - STRIDE Advance at Texas A&M. Strategies and Tactives for Recruiting to Improve Diversity and Excellence workshop (online).

Consulting Activities

- Spring 2006-**present**. Dr. Tedeschi assists Performance Cattle, LLC to implement the algorithm to compute individual dry matter required of beef cattle fed in groups for use in US feedlots.
- Spring 2008-2012. Dr. Tedeschi was a consultant for Microbeef Technologies, Inc. His role is in assisting the correct implementation of mathematical models to correctly manage individual beef cattle in feedyard conditions.
- Spring 2007. Dr. Tedeschi was part of a proposal team with Eastern Research Group (ERG) on a mission contract with the US Environmental Protection Agency's Climate Change Division.
- Fall 2007 – Spring 2009. Dr. Tedeschi was an *ad hoc* consultant for Elanco Mexico in the development of new products for dairy cattle.
- Fall 2007-2011. Dr. Tedeschi was an *ad hoc* consultant for DALEX. DALEX, Inc. develops nutrition software to assist with nutrition and management of beef and dairy cattle.
- August 2008 – June 2009. Dr. Tedeschi was an *ad hoc* consultant for The World Bank. The project included the development of a mathematical model to predict methane production of animals grazing warm grass forages (tropics).
- July 2011 – July 2012. Dr. Tedeschi was an *ad hoc* consultant for Terrabon.
- May 2014 – July 2014. Dr. Tedeschi was an *ad hoc* reviewer for Winrock International.
- September 2016 – **present**. Dr. Tedeschi is a consultant for Phibro Animal Health.

National Program Activities

University	Project	Role	Date
Cornell University	Development and adaptation of nutrition models for beef cattle and Development of volatile fatty acid and ruminal pH model for cattle	PI	2005 – 2015
University of Nebraska-Lincoln	CPM-Dairy feedstuff input values for Dakota Gold co-products	PI	2006 – 2012
Cornell University	Refinement of the rumen submodel of the CNCPS; hyper-ammonia-producing bacteria, peptide uptake, and stimulation, and ammonia production	PI	2006 – 2011

NAS/NRC	National Academy of Sciences – National Research Council, Nutrient Requirements of Beef Cattle: • February 25-26, 2013. Beef NRC Committee meeting in Washington, DC • September 17-18, 2013. Beef NRC Committee meeting in Irvine, CA • February 18-19, 2014. Beef NRC Committee meeting in Washington, DC • April 11, 2014. Beef NRC Committee meeting in San Antonio, TX	Member	2013 – 2016
NANP/NRSP9	Modeling Committee of the National Animal Nutrition Program funded by the National Research Support Project	Member	2012 – **present**
NANP/NRSP9	Coordinating Committee of the National Animal Nutrition Program funded by the National Research Support Project	Member	2021- **present**

Regional/National/International Committees

Date	Committee	Role	Location (Date)
2006 - present	International Small Ruminant Nutrition Committee	Steering Committee	Jaboticabal, SP
2011 - 2013	4th International Symposium on Energy and Protein Metabolism and Nutrition	Steering Committee	Davis, CA (Sep 9-12, 2013)
2013 – present	Chungnam National University Global Network on Adaptation to Climate Change in Livestock Science	Member	South Korea
2012 – present	National Animal Nutrition Program, National Research Support Project (NRSP-9)	Modeling Committee	Washington, DC
2013 – 2016	National Academy of Sciences	Nutrient Requirement of Beef Cattle Committee	Washington, DC

VIII. International Involvement

Research Program Activities

Country	Project	Role	Date
Italy (SU)	SRNS - a mathematical nutrition model for small ruminants	Co-PI Dr. A. Cannas (PI)	2005 - present
Brazil (UFV and UNESP)	Development and application of a mathematical model for goat production	Co-PI	2006 - present
Brazil (USP and UFRPE) and US (UCD and CU)	FIPSE-CAPES Program: Brazil–U.S. Consortium in Sustainable Ruminant Livestock Production Systems: An Integrated Approach to Education, Research and Communication in Nutrition and Management of Ruminant Livestock	Co-PI	2005 - 2008
Brazil (USP and UFRPE) and US (TAMU, UCD, and CalPoly)	FIPSE-CAPES Program: Ruminant Production in the 21st Century: Globalization of Teaching, Research, and Extension to Support Environmentally-Friendly Nutrition and Management Systems	PI	2008-2013

SU = Sassari University, UFV = Federal University of Viçosa, UNESP = University of the São Paulo State, USP = University of São Paulo, UFRPE = Universidade Federal Rural de Pernambuco, UCD = University of California, Davis, CU = Cornell University, TAMU = Texas A&M University.

Undergraduate Student Exchange Activities

The following undergraduate students are exchange students under the FIPSE/CAPES program: "Brazil–U.S. Consortium in Sustainable Ruminant Livestock Production Systems: An Integrated Approach to Education, Research and Communication in Nutrition and Management of Ruminant Livestock".

- Jose Pavan Neto (January to June 2007) - Visitingscholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Gabriel Santana (January to June 2007) - Visitingscholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Elizabeth Cristina da Silva (January to June 2007) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.

- Rafael de Aquino (August to December 2007) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Carolina Monteiro (August 2007 to July 2008) – Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Eliza Trickett (August 2007 to July 2008) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.

The following undergraduate students are exchange students under the FIPSE/CAPES program: "Ruminant Production in the 21st Century: Globalization of Teaching, Research, and Extension to Support Environmentally-Friendly Nutrition and Management Systems".

- Denea Pires (January 2009 to June 2009) – Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Kalina Martins (January 2009 to June 2009) – Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Ana Paula Silva (January 2009 to June 2009) – Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Fabiane Mascari (January 2009 to June 2009) – Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Valdson Silva (August to December 2009) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Juana Chagas (August to December 2009) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Andrea Ianni (August to December 2009) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Viviann Biglia (August to December 2009) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Beryk Salab (January to June 2010) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Julyana Sena (January to June 2010) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Mateus Freua (January to June 2010) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Marcelo Lima (August to December 2010) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Priscila Levy (August to December 2010) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Kathleen Andrades (January to July 2011) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Driane Pedro (August to December 2011) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Paula Parra (August to December 2011) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Ivo Gonzalez (August to December 2011) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.

- Miguel Machado (January to July 2012) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Igor Gonzales (August to December 2012) - Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.
- Cledir Lima (August to December 2012) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Ana Gomes (August to December 2012) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Gleise Medeiros (August to December 2012) - Visiting scholar from the Universidade Federal Rural de Pernambuco, Recife, PE, Brazil.
- Paulo Cancian (March 2012 to April 2013) – Visiting scholar from the University of São Paulo, Pirassununga, SP, Brazil.

The following undergraduate students were interns at Texas A&M University.

- 2008. Leonardo Baptista. State University of Sao Paulo, Botucatu (Brazil).
- 2008. Victor Terribile. State University of Sao Paulo, Botucatu (Brazil).
- 2009. Tomas Lucero. University of Zacatecas, Zacatecas (Mexico).
- 2010. Jae K. Jung. Chungnam National University (South Korea).
- 2012. Paulo Cancian. University of Sao Paulo/FZEA, Pirassununga, (Brazil).
- 2014. Vinicius Briani. University of Sao Paulo/FZEA, Pirassununga, (Brazil).
- 2015. Ninive Corletto. State University of Londrina, Londrina, (Brazil).
- 2016. Alexandre Fioravanti Sampaio. State University of Londrina, Londrina, (Brazil).
- 2017. Luiz Fernando Dias Batista. State University of Sao Paulo, Botucatu (Brazil).
- 2018. Orlando Soto. University of Zamorano, Tegucigalpa (Honduras).
- 2018. Roberta Cracco. University of Sao Paulo/FZEA, Pirassununga, (Brazil).
- 2019. Saul Aguilar Zelaya. University of Zamorano, Tegucigalpa (Honduras).

IX. Grants and Contracts

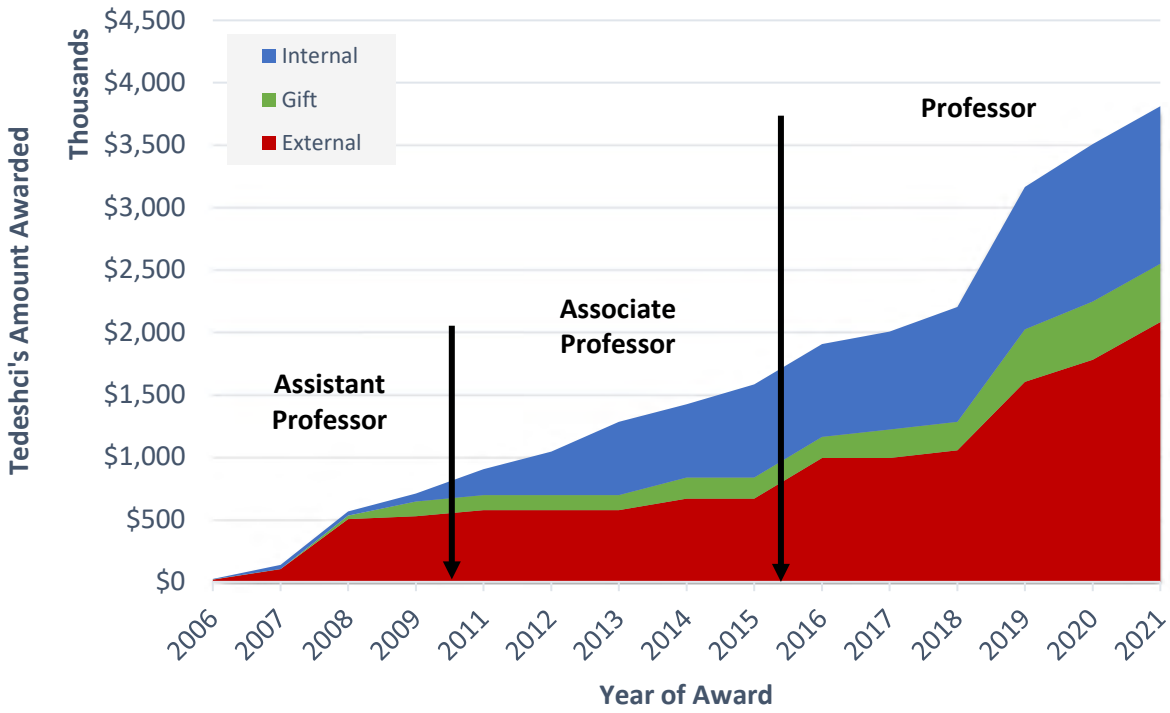
Grants and Contracts Awarded

Tabular Summary

Type &	Since the last faculty position [1] (x $1,000)						Career	
Role	Assistant		Associate		Professor			
	Total $	Tedeschi $	Total $	Tedeschi $	Total $	Tedeschi $	Total $	Tedeschi $
External								
PI	$ 480.09	$ 413.49	$ 50.00	$ 50.00	$ 1,021.49	$ 1,021.49	$ 1,551.58	$ 1,484.98
CoPI	$ 1,222.48	$ 112.28	$ 520.30	$ 92.00	$ 2,644.75	$ 393.01	$ 4,387.53	$ 597.28
Total	$ 1,702.57	$ 525.76	$ 570.30	$ 142.00	$ 3,666.25	$ 1,414.50	$ 5,939.11	$ 2,082.26
Internal								
PI	$ 2.50	$ 2.50	$ 446.00	$ 446.00	$ 676.51	$ 624.39	$ 1,125.01	$ 1,072.89
CoPI	$ 210.40	$ 61.00	$ 296.00	$ 77.47	$ 90.00	$ 50.00	$ 596.40	$ 188.47
Total	$ 212.90	$ 63.50	$ 742.00	$ 523.47	$ 766.51	$ 674.39	$ 1,721.41	$ 1,261.36
Gifts	$ 164.99	$ 118.67	$ 50.00	$ 50.00	$ 299.60	$ 299.60	$ 514.59	$ 468.27
Total	**$ 2,080.46**	**$ 707.93**	**$ 1,362.30**	**$ 715.47**	**$ 4,732.36**	**$ 2,388.49**	**$ 8,175.12**	**$ 3,811.88**

[1] Assistant Professor: 2005 to 2010, Associate Professor: 2010 to 2015, Professor: September 1st, 2015.

Graphical Summary



Description

Type/Role/Year/Funded/Sponsor: Title (Period)	Full $	Tedeschi $
External	**$ 5,939,114**	**$2,082,261**
CoPI	**$ 4,387,534**	**$597,281**
2007		
BARD: Enhancing sustainability of cattle production systems through discovery of biomarkers for feed efficiency (2007-2010)	$ 352,000	$35,200
NCBA: Evaluation of temperament indicator traits to predict performance efficiency and beef tenderness in finishing steers (2007-2008)	$ 84,000	$8,400
Smith Lever: Evaluation of a model to optimize land and animal resources to improve profitability on New York beef farms (2007-2008)	$ 19,000	$1,900
2008		
Ag Reserves: Progeny evaluation of feed efficiency, feeding behavior, temperament and carcass-quality traits to enhance efficient production of high-quality beef (2008-2010)	$ 393,000	$13,100
USDE: Brazil–US Consortium in Sustainable Ruminant Livestock Production Systems: An integrated approach to education, research and communication in nutrition and management of ruminant livestock (2008-2009)	$ 203,980	$30,000
2009		
NPB: Post-harvest prediction of pork tenderness (2009-2010)	$ 107,800	$8,000
NCBA: Interactive effects of tenderness genotype and growth enhancement technologies on performance and beef tenderness in feedlot heifers (2009-2010)	$ 62,700	$15,675
2014		
Lallemand, Inc.: A behavioral-based monitoring system for preclinical detection and mitigation of bovine respiratory disease in beef cattle (2014-2015)	$ 159,000	$10,000
Lallemand, Inc.: Application of fermentative technologies to enhance efficiency of feed utilization in beef cattle (2014-2020)	$ 300,000	$72,000
Lallemand, Inc.: Dose-response effects of Levucell SC on feed efficiency, feeding behavior and reproductive performance of growing heifers (2014-2015)	$ 61,300	$10,000
2018		
NCBA: Modeling Beef Flavor (2018-2019)	$ 60,000	$25,000
2020		
Meat Livestock Australia: Predictive models and technologies for maximum profit endpoints in feedlots (2020-2022)	$ 869,094	$166,000
USDA: Improving the sustainability of rural veterinarians through mentoring, targeted education, telemedicine, and monitoring of disease syndromes (2020-2022)	$ 248,079	$8,651
2021		
Texas Corn Producer Board: Hi-A Corn as a Dairy Feed for Rumen-Protein Bypass, Lower Methane Emissions, Potential Animal Health Benefits and Increased Environmental Sustainability (2021-2023)	$ 61,000	$5,000
USDA-NIDA-AFRI-NNF: Generating Expertise To Optimize Beef Production In Tropical/Subtropical Environments (2021-2026)	$ 238,500	$79,500
NSF-NRI3: Configurable, Adaptive, and Scalable Swarm of Ground and Aerial Robots for Collaborative Smart Agriculture (2021-2024)	$ 1,000,000	$33,333
NPB: Creating a sustainability index for the United States swine industry through stochastic modeling (2021-2024)	$ 168,081	$75,522
PI	**$ 1,551,580**	**$1,484,980**
2006		
King Ranch: Using mechanistic nutrition models to identify efficient beef cows under grazing conditions (2006-2008)	$ 19,332	$19,332
2007		
Alltech: The impact of Optigen II on nitrogen balance and performance of growing cattle fed steam flaked corn (2007-2008)	$ 50,000	$37,200
2008		
Dakota Gold: A feed evaluation system to predict the biological value of corn milling	$ 111,000	$86,000

Type/Role/Year/Funded/Sponsor: Title (Period)	Full $	Tedeschi $
(co)products. phase ii – determining protein fractionation and fermentation dynamics (2008-2009)		
King Ranch: Evaluating a mechanistic nutrition model to account for individual variation in production efficiency of Santa Gertrudis cows (2008-2010)	$ 79,800	$51,000
USDE: Ruminant production in the 21st century: globalization of teaching, research, and extension to support environmentally friendly nutrition and management systems (2008-2012)	$ 219,956	$219,956
2011		
King Ranch: Determination of production efficiency of Santa Gertrudis cows using a mechanistic nutrition model and integration with post-weaning progeny evaluation for genetic merit purposes (2011-2013)	$ 50,000	$50,000
2016		
AB Vista: Evaluation of Growing and Finishing Performance, Carcass Composition, and Intake behavior of Steers Receiving an Active Dry Yeast Supplement (2016-2017)	$ 324,189	$324,189
2018		
Meat Livestock Australia: Predictive models and technologies for maximum profit endpoints in feedlots (2018-2019)	$ 12,500	$12,500
USDA-AFRI-FACT: FACT: Future of Data Analytics in Nutrition: Knowledge Gaps, Data Collection and Quality, and the Role of Supporting Tools for Sustainable Development (2018-2019)	$ 24,813	$24,813
2019		
Phibro Animal Health: Determining the Maximum Effectiveness of Virginiamycin Administration for Animal Health: Impact on Animal Performance, Intake Dynamics, Rumen Acidosis, and Occurrence of Liver and Lung Abscesses in Growing and Finishing Calves (2019-2021)	$ 550,000	$550,000
2021		
USDA-NIFA-AFRI-FAS: DSFAS: Mathematical Modeling in Animal Nutrition: Training the Future Generation in Data and Predictive Analytics for a Sustainable Development (2021-2023)	$ 14,991	$14,991
USDA-FAS: Climate-Smart Grasslands for Livestock Production in Subtropical Climates: Enhancing Forb Secondary Compounds for Reducing Rumen Methane Emission and Increasing Animal Production Sustainability (2021-2022)	$ 59,999	$59,999
Phibro Animal Health: Antimicrobial Resistance Acquisition due to Intermittent or Prolonged Exposure to Macrolides for the Prevention of Liver Abscesses in Beef Cattle (2021-2024)	$ 35,000	$35,000
Gift	**$ 514,592**	**$468,266**
PI	**$ 514,592**	**$468,266**
2008		
Dakota Gold: A feed evaluation system to predict the biological value of corn milling co-products (2008-2009)	$ 46,890	$24,666
Alltech: The impact of Optigen II on nitrogen balance and performance of growing cattle fed steam flaked corn (2008-2009)	$ 4,000	$4,000
2009		
Dakota Gold: A feed evaluation system to predict the biological value of corn milling co-products and their combinations (2009-2010)	$ 114,102	$90,000
2014		
Huvepharma: Evaluation of Volatile Fatty Acids and Methane Concentrations due to Ruminal Microbe Adaptation to Continuous and Rotating Feeding Regimens of Bambermycin and Monensin (2014-2015)	$ 50,000	$50,000
2017		
Phileo: Evaluation of Phileo Lesaffre Yeast Actisaf for Ruminant Nutrition: In Vitro Characterization of Fermentation Dynamics and End Products of Fermentation (2017-2018)	$ 60,000	$60,000
2019		
Phibro Animal Health: Determining the Maximum Effectiveness of Virginiamycin Administration for Animal Health: Impact on Animal Performance, Intake Dynamics, Rumen Acidosis, and Occurrence of Liver and Lung Abscesses in Growing and Finishing Calves (2019-2020)	$ 150,000	$150,000
Phibro Animal Health: Rumen Health Compendium	$ 39,600	$39,600
2020		
Phibro Animal Health: Determining the Maximum Effectiveness of Virginiamycin Administration for Animal Health: Impact on Animal Performance, Intake Dynamics, Rumen Acidosis, and	$ 50,000	$50,000

Type/Role/Year/Funded/Sponsor: Title (Period)	Full $	Tedeschi $
Occurrence of Liver and Lung Abscesses in Growing and Finishing Calves (2019-2020)		
Internal	**$ 1,721,410**	**$1,261,357**
CoPI	**$ 596,400**	**$188,467**
2006		
TX Beef Industry: Enhancing sustainability of beef production systems through improvements in feed efficiency (2006-2007)	$ 40,400	$4,000
2007		
State Beef Initiative: Control of sexual maturation in the beef heifer through short-term manipulation of early-calfhood nutrition (2007-2009)	$ 80,000	$27,000
2009		
State Beef Initiative: An exploration of biological mechanisms that impact intake efficiency of the grazing animal (2009-2011)	$ 90,000	$30,000
2013		
AgriLife: A behavioral-based monitoring system for preclinical detection and mitigation of bovine respiratory disease in beef cattle (2013-2015)	$ 159,000	$31,800
AgriLife: Estimates and prediction of efficiency of stocker production when supplemented with levels of DDG on pastures n humid and semi-arid regions of Texas (2013-2015)	$ 137,000	$45,667
2018		
AgriLife: Mitigating methane emission from beef operations (2018-2020)	$ 90,000	$50,000
PI	**$ 1,005,010**	**$952,890**
2006		
Big 12 Faculty Fellowship: Improving the utilization of cottonseed products by the cattle industry through precision feeding (2006-2007)	$ 1,000	$1,000
2007		
Big 12 Faculty Fellowship: Effects of feeding dairy diets containing corn milling co-products on energy balance and milk yield of holstein dairy cows (2007-2008)	$ 1,000	$1,000
2009		
COALS: Effects of feeding dairy diets containing corn milling co-products on milk yield and milk quality of Holstein dairy cows (2009-2010)	$ 500	$500
2011		
AgriLife: The potential environmental benefit of dried distillers' grain (co)products in the abatement of methane emissions by beef cattle (2011-2013)	$ 146,000	$146,000
2012		
AgriLife: Physicochemical and Nutritional Characterization of the Native Forages of the Ukulima Farm to Develop Feeding Strategies and Mineral Supplementation of Wildlife and Ruminant Animals (2012-2014)	$ 140,000	$140,000
2013		
AgriLife: A comparative assessment of dried distillers' grain, ionophore, saponin, and condensed tannin for methane emission abatement in beef cattle (2013-2015)	$ 160,000	$160,000
2015		
AgriLife: Improving Beef Cattle Sustainability through Selective Microbiome Engineering in Growing Cattle under Heat Stress Conditions (2015-2017)	$ 196,510	$158,510
2017		
ANSC Mini Grant: Sustainable and Water-Efficient Beef Cattle Industry in Texas (2017-2019)	$ 40,000	$40,000
2018		
AgriLife: Uncovering the potential benefits of yeast and bacteriophages as antibiotic replacements for feedlot cattle under heat stress conditions (2018-2020)	$ 100,000	$85,880
2019		
ANSC Mini-Grant: Determination of Dietary Fiber and its End-Products of Ruminal Fermentation: Short-Chain Fatty Acids and Methane (2019-2020)	$ 20,000	$20,000
Chancellor: Enhancing Development and Generating Excellence in Scholarship (EDGES) (2019-2022)	$ 200,000	$200,000
2020		
AgriLife: Determination of Greenhouse Gas (Methane) and Short-Chain Fatty Acids from	$ 100,000	$100,000

Type/Role/Year/Funded/Sponsor: Title (Period)	Full $	Tedeschi $
Ruminants (2020-2021)		
PTTG: Closing the Experience Gap in Agriculture Education: Development of Virtual Simulation Games as a Transformational Student Learning Tool (2020-2021)	$ 20,000	$20,000
Grand Total	**$ 8,175,116**	**$3,811,884**

Grants and Contracts Not Awarded

Items	Count	Full $	Tedeschi $
External	**69**	**$ 51,257,747**	**$ 16,766,925**
CoPI	**28**	**$ 41,932,149**	**$ 8,803,456**
2006	1	$ 19,800	$ 19,800
2007	4	$ 1,044,445	$ 1,044,445
2008	1	$ 83,443	$ 83,443
2009	2	$ 175,975	$ 175,975
2010	3	$ 4,989,500	$ 4,684,863
2011	1	$ 360,313	$ 60,052
2012	4	$ 868,995	$ 193,647
2013	1	$ 298,590	$ 74,672
2015	2	$ 100,000	$ 46,667
2018	5	$ 23,266,994	$ 1,866,994
2020	4	$ 10,724,094	$ 552,899
PI	**41**	**$ 9,325,598**	**$ 7,963,468**
2006	5	$ 752,451	$ 752,451
2007	3	$ 315,883	$ 315,883
2009	1	$ 86,821	$ 86,821
2010	1	$ 200,000	$ 200,000
2011	4	$ 483,984	$ 458,864
2012	2	$ 162,921	$ 162,921
2013	1	$ 92,307	$ 92,307
2014	1	$ 499,997	$ 224,783
2015	2	$ 295,000	$ 295,000
2016	3	$ 1,081,164	$ 953,549
2017	4	$ 720,978	$ 441,797

Items	Count	Full $	Tedeschi $
2018	5	$ 1,154,457	$ 654,457
2019	2	$ 553,416	$ 553,416
2020	4	$ 1,116,689	$ 1,116,689
2021	2	$ 1,159,703	$ 1,004,703
2022	1	$ 649,827	$ 649,827
Internal	**29**	**$ 2,264,156**	**$ 1,622,966**
CoPI	**13**	**$ 1,402,600**	**$ 788,410**
2006	2	$ 120,000	$ 120,000
2009	4	$ 304,500	$ 304,500
2010	1	$ 34,000	$ 34,000
2011	3	$ 595,000	$ 155,360
2015	2	$ 249,100	$ 124,550
2018	1	$ 100,000	$ 50,000
PI	**16**	**$ 861,556**	**$ 834,556**
2006	1	$ 22,000	$ 22,000
2007	3	$ 172,315	$ 172,315
2008	3	$ 101,141	$ 101,141
2009	2	$ 112,100	$ 112,100
2014	1	$ 50,000	$ 50,000
2015	2	$ 74,000	$ 62,000
2018	1	$ 200,000	$ 200,000
2019	2	$ 110,000	$ 105,000
2020	1	$ 20,000	$ 10,000
Grand Total	**98**	**$ 53,521,903**	**$ 18,389,891**

X. Publications and Professional Output

Publications

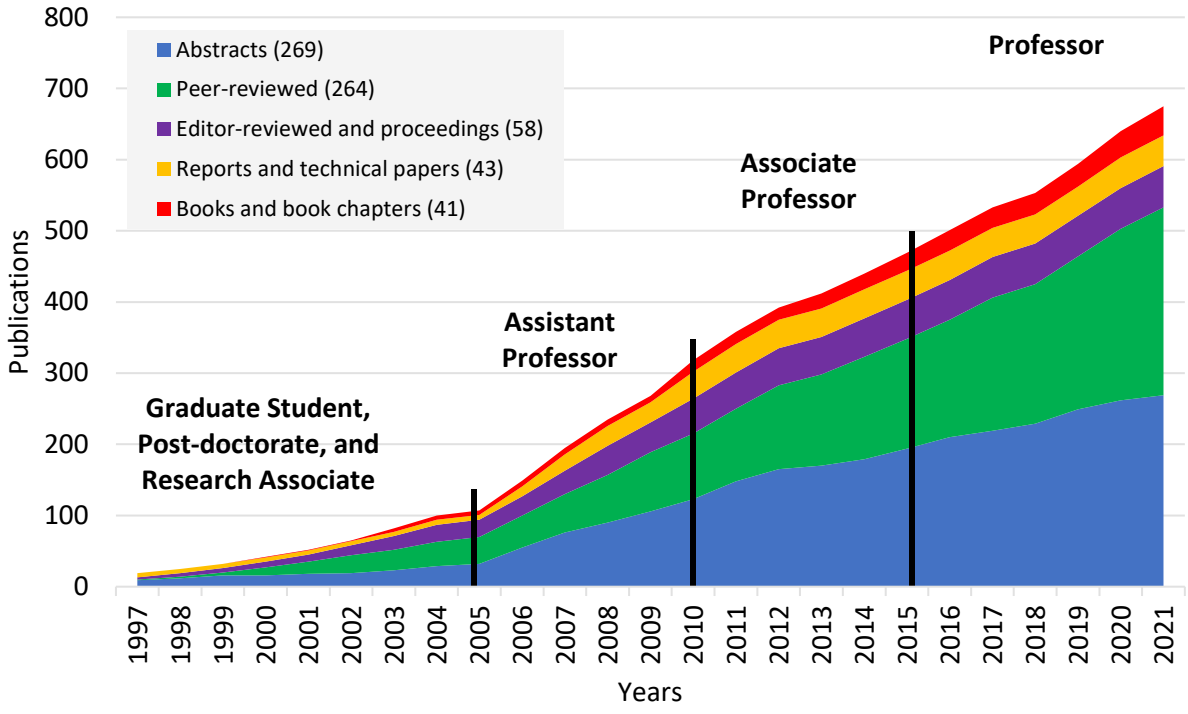
Note: Underlined author denotes chair/co-chair graduate students.

Tabular Summary

Type	Prior	Since the last faculty position [1]			Career
		Assistant	Associate	Professor	
Refereed/Peer-Reviewed	38	54	62	110	264
Editor-Reviewed	24	25	6	3	58
Scientific Abstract	32	91	71	75	269
Books/Chapters in Books	6	10	9	16	41
Extension/Popular/Industry Articles	7	31	3	2	43
Total	**107**	**211**	**151**	**206**	**675**

[1] Assistant Professor: 2005 to 2010, Associate Professor: 2010 to 2015, Professor: September 1st, 2015.

Graphical Summary



Peer-Reviewed

1. **1997 (Cornell University)**
   1.1. Alleoni, G. F., P. R. Leme, C. Boin, R. F. Nardon, J. J. A. D. Demarchi, P. D. Vieira, and **L. O. Tedeschi**. 1997. Evaluation of the physical and chemical composition of rib cuts as predictors of body composition of Nellore steers. Rev. Bras. Zootec. 26 (2):382-390.
2. **1998**
   2.1. de Carvalho, M. P., C. Boin, D. P. D. Lanna, and **L. O. Tedeschi**. 1998. Partial replacement of corn for energy byproducts in steer diets, based on sugarcane bagasse treated with steam and pressure: digestibility, ruminal parameters, and in situ degradation. Rev. Bras. Zootec. 27:1182-1192.
3. **1999**
   3.1. Lanna, D. P. D., **L. O. Tedeschi**, and J. A. Beltrame Filho. 1999. Linear and non-linear models of nutrient utilization to formulate diets for ruminants. Scientia Agricola. 56:479-488.
   3.2. **Tedeschi, L. O.**, C. Boin, R. F. Nardon, and P. R. Leme. 1999. Effects of concentrate supplementation on growth, from weaning to slaughter, on steers of the Guzera breed and their crossbreds grazing Guinea grass (*P. maximum* jacq.). B. Indústr. Anim. 56:195-205.
4. **2000**
   4.1. Leme, P. R., C. Boin, R. C. C. Margarido, and **L. O. Tedeschi**, J. C. O. F. V. Hausknecht, G. F. Alleoni, and A. Luchiari Filho. 2000. Growth performance in feedlot and carcass characteristics of beef cattle from several crossbreds slaughtered in three body weight ranges. Rev. Bras. Zootec. 29:2347-2353.
   4.2. **Tedeschi, L. O.**, C. Boin, R. F. Nardon, and P. R. Leme. 2000. Growth curve analysis of Guzera and their crossbreds fed under grazing with or without supplementation. 1. Analysis and selection of nonlinear functions. Rev. Bras. Zootec. 29 (2):630-637. doi: 10.1590/S1516-35982000000200040
   4.3. **Tedeschi, L. O.**, C. Boin, R. F. Nardon, and P. R. Leme. 2000. Growth curve analysis of Guzera and their crossbreds fed under grazing with or without supplementation. 2. Evaluation of growth curve parameters. Rev. Bras. Zootec. 29 (5):1578-1587. doi: 10.1590/S1516-35982000000500040
   4.4. **Tedeschi, L. O.**, D. G. Fox, L. E. Chase, and S. J. Wang. 2000. Whole-herd optimization with the Cornell net carbohydrate and protein system. I. Predicting feed biological values for diet optimization with linear programming. J. Dairy Sci. 83 (9):2139-2148. doi: 10.3168/jds.S0022-0302(00)75097-1
   4.5. **Tedeschi, L. O.**, D. G. Fox, and J. B. Russell. 2000. Accounting for the effects of a ruminal nitrogen deficiency within the structure of the Cornell net carbohydrate and protein system. J. Anim. Sci. 78 (6):1648-1658. doi: 10.2527/2000.7861648x
   4.6. Wang, S.-J., D. G. Fox, D. J. R. Cherney, L. E. Chase, and **L. O. Tedeschi**. 2000. Whole herd optimization with the Cornell net carbohydrate and protein system. II. Allocating home grown feeds across the herd for optimum nutrient use. J. Dairy Sci. 83 (9):2149-2159. doi: 10.3168/jds.S0022-0302(00)75098-3
   4.7. Wang, S.-J., D. G. Fox, D. J. R. Cherney, L. E. Chase, and **L. O. Tedeschi**. 2000. Whole herd optimization with the Cornell net carbohydrate and protein system. III. Application of an optimization model to evaluate alternatives to reduce nitrogen

and phosphorus mass balance. J. Dairy Sci. 83 (9):2160-2169. doi: 10.3168/jds.S0022-0302(00)75099-5

5. 2001

5.1. Guiroy, P. J., D. G. Fox, **L. O. Tedeschi**, M. J. Baker, and M. D. Cravey. 2001. Predicting individual feed requirements of cattle fed in groups. J. Anim. Sci. 79 (8):1983-1995. doi: 10.2527/2001.7981983x

5.2. Nardon, R. F., A. G. Razook, A. A. M. Sampaio, **L. O. Tedeschi**, L. A. Figueiredo, C. Boin, and M. L. P. Lima. 2001. Genetic selection on beef cattle: Effects on carcass edible meat and meat quality. B. Indústr. Anim. 58 (1):21-34.

5.3. Nardon, R. F., A. A. M. Sampaio, A. G. Razook, **L. O. Tedeschi**, C. Boin, L. A. Figueiredo, M. L. P. Lima, and F. G. Castro Jr. 2001. Genetic selection of beef cattle effects for post weaning body weight and breed type on feedlot growth performance. B. Indústr. Anim. 58 (1):9-19.

5.4. Razook, A. G., R. F. Nardon, **L. O. Tedeschi**, L. A. Figueiredo, J. N. S. G. Cyrillo, and A. C. Ruggieri. 2001. Physical composition estimates of carcass and empty body weight on samples of the 15th progeny of Sertãozinho (SP-Brasil) Zebu and Caracu herds. Rev. Bras. Zootec. 30 (Suppl. 1) (3):1037-1043. doi: 10.1590/S1516-35982001000400018

5.5. Ruiz, R., G. L. Albrecht, **L. O. Tedeschi**, G. Jarvis, J. B. Russell, and D. G. Fox. 2001. Effect of monensin on the performance and nitrogen utilization of lactating dairy cows consuming fresh forage. J. Dairy Sci. 84 (7):1717-1727. doi: 10.3168/jds.S0022-0302(01)74607-3

5.6. **Tedeschi, L. O.**, A. N. Pell, D. G. Fox, and C. R. Llames. 2001. The amino acid profiles of the whole plant and of four residues from temperate and tropical forages. J. Anim. Sci. 79 (2):525-532. doi: 10.2527/2001.792525x

6. 2002

6.1. Guiroy, P. J., **L. O. Tedeschi**, D. G. Fox, and J. P. Hutcheson. 2002. The effects of implant strategy on finished body weight of beef cattle. J. Anim. Sci. 80 (7):1791-1800. doi: 10.2527/2002.8071791x

6.2. Knaus, W. F., D. H. Beermann, **L. O. Tedeschi**, M. Czajkowski, D. G. Fox, and J. B. Russell. 2002. Effects of urea, isolated soybean protein and blood meal on growing steers fed a corn-based diet. Anim. Feed Sci. Technol. 102:3-14. doi: 10.1016/S0377-8401(02)00182-7

6.3. Muscato, T. V., **L. O. Tedeschi**, and J. B. Russell. 2002. The effect of ruminal fluid preparations on the growth and health of new-born, milk-fed dairy calves. J. Dairy Sci. 85:648-656. doi: 10.3168/jds.S0022-0302(02)74119-2

6.4. Ruiz, R., **L. O. Tedeschi**, J. C. Marini, D. G. Fox, A. N. Pell, G. Jarvis, and J. B. Russell. 2002. The effect of a ruminal nitrogen (N) deficiency in dairy cows: evaluation of the Cornell net carbohydrate and protein system ruminal N deficiency adjustment. J. Dairy Sci. 85 (11):2986-2999. doi: 10.3168/jds.S0022-0302(02)74384-1

6.5. **Tedeschi, L. O.**, M. J. Baker, D. J. Ketchen, and D. G. Fox. 2002. Performance of growing and finishing cattle supplemented with a slow-release urea product and urea. Can. J. Anim. Sci. 82:567-573. doi: 10.4141/A02-018

6.6. **Tedeschi, L. O.**, C. Boin, D. G. Fox, P. R. Leme, G. F. Alleoni, and D. P. D. Lanna. 2002. Energy requirement for maintenance and growth of Nellore bulls and steers fed high-forage diets. J. Anim. Sci. 80 (6):1671-1682. doi: 10.2527/2002.8061671x

6.7. **Tedeschi, L. O.**, D. G. Fox, A. N. Pell, D. P. D. Lanna, and C. Boin. 2002. Development and evaluation of a tropical feed library for the Cornell Net Carbohydrate and

Protein System model. Sci. Agric. 59 (1):1-18. doi: 10.1590/S0103-90162002000100001

6.8. **Tedeschi, L. O.**, R. F. Nardon, C. Boin, and P. R. Leme. 2002. Effects of dry season and year-round feed supplementation on reproductive performance and body weight of Guzera breed cattle and their crossbreds grazing guineagrass (*Panicum maximum* Jacq.). B. Indústr. Anim. 59 (2):185-195.

7. 2003

7.1. de Capdeville, G., S. V. Beer, C. B. Watkins, C. L. Wilson, **L. O. Tedeschi**, and J. R. Aist. 2003. Pre- and post-harvest harpin treatments of apples induce resistance to blue mold. Plant Disease. 87:39-44. doi: 10.1094/PDIS.2003.87.1.39

7.2. Knaus, W. F., D. H. Beermann, **L. O. Tedeschi**, P. J. Guiroy, M. L. Boehm, and D. G. Fox. 2003. Effects of urea, exogenous estradiol-17B, and nitrogen utilization in Holstein steers fed a low-protein diet. Can. J. Anim. Sci. 83:523-531. doi: 10.4141/A02-079

7.3. Rueda, B. L., R. W. Blake, C. F. Nicholson, D. G. Fox, **L. O. Tedeschi**, A. N. Pell, E. C. M. Fernandes, J. F. Valentim, and J. C. Carneiro. 2003. Production and economic potentials of cattle in pasture-based systems of the western Amazon region of Brazil. J. Anim. Sci. 81 (12):2923-2937. doi: 10.2527/2003.81122923x

7.4. **Tedeschi, L. O.**, D. G. Fox, and T. P. Tylutki. 2003. Potential environmental benefits of ionophores in ruminant diets. J. Environ. Qual. 32 (5):1591-1602. doi: 10.2134/jeq2003.1591

8. 2004

8.1. Cannas, A., **L. O. Tedeschi**, D. G. Fox, A. N. Pell, and P. J. Van Soest. 2004. A mechanistic model for predicting the nutrient requirements and feed biological values for sheep. J. Anim. Sci. 82 (1):149-169. doi: 10.2527/2004.821149x

8.2. Fox, D. G., **L. O. Tedeschi**, T. P. Tylutki, J. B. Russell, M. E. Van Amburgh, L. E. Chase, A. N. Pell, and T. R. Overton. 2004. The Cornell Net Carbohydrate and Protein System model for evaluating herd nutrition and nutrient excretion. Anim. Feed Sci. Technol. 112 (1):29-78. doi: 10.1016/j.anifeedsci.2003.10.006

8.3. Molina, D. O., I. Matamoros, Z. Almeida, **L. O. Tedeschi**, and A. N. Pell. 2004. Evaluation of the dry matter intake predictions of the Cornell Net Carbohydrate and Protein System with Holstein and dual-purpose lactating cattle in the tropics. Anim. Feed Sci. Technol. 114:261-278. doi: 10.1016/j.anifeedsci.2003.11.010

8.4. Reynoso-Campos, O., D. G. Fox, R. W. Blake, M. C. Barry, **L. O. Tedeschi**, C. F. Nicholson, H. M. Kaiser, and P. A. Oltenacu. 2004. Predicting nutritional requirements and lactation performance of dual-purpose cows using a dynamic model. Agric. Syst. 80 (1):67-83. doi: 10.1016/j.agsy.2003.06.003

8.5. **Tedeschi, L. O.**, D. G. Fox, and P. J. Guiroy. 2004. A decision support system to improve individual cattle management. 1. A mechanistic, dynamic model for animal growth. Agric. Syst. 79 (2):171-204. doi: 10.1016/S0308-521X(03)00070-2

9. 2005

9.1. Abdelsamei, A. H., D. G. Fox, **L. O. Tedeschi**, M. L. Thonney, D. J. Ketchen, and J. R. Stouffer. 2005. The effect of milk intake on forage intake and growth of nursing calves. J. Anim. Sci. 83 (4):940-947. doi: 10.2527/2005.834940x

9.2. Lana, R. P., R. H. T. B. Goes, L. M. Moreira, A. B. Mâncio, D. M. Fonseca, and **L. O. Tedeschi**. 2005. Application of Lineweaver-Burk data transformation to explain animal and plant performance as a function of nutrient supply. Livest. Prod. Sci. 98:219-224. doi: 10.1016/j.livprodsci.2005.03.008

9.3. **Tedeschi, L. O.**, D. G. Fox, and P. H. Doane. 2005. Evaluation of the tabular feed energy and protein undegradability values of the National Research Council nutrient requirements of beef cattle. Prof. Anim. Scient. 21 (5):403-415. doi: 10.15232/S1080-7446(15)31238-9

9.4. **Tedeschi, L. O.**, D. G. Fox, R. D. Sainz, L. G. Barioni, S. R. Medeiros, and C. Boin. 2005. Using mathematical models in ruminant nutrition. Sci. Agric. 62 (1):76-91. doi: 10.1590/S0103-90162005000100015

10. 2006 (Assistant Professor at TAMU)

10.1. Baker, M. J., **L. O. Tedeschi**, D. G. Fox, W. R. Henning, and D. J. Ketchen. 2006. Using ultrasound measurements to predict body composition of yearling bulls. J. Anim. Sci. 84:2666-2672. doi: 10.2527/jas.2006-006

10.2. Seo, S., **L. O. Tedeschi**, C. G. Schwab, and D. G. Fox. 2006. Development and evaluation of empirical equations to predict feed passage rate in cattle. Anim. Feed Sci. Technol. 128 (1-2):67-83. doi: 10.1016/j.anifeedsci.2005.09.014

10.3. Seo, S., **L. O. Tedeschi**, C. G. Schwab, and D. G. Fox. 2006. Evaluation of the passage rate equations in the 2001 Dairy NRC Model. J. Dairy Sci. 89 (6):2327-2342. doi: 10.3168/jds.S0022-0302(06)72304-9

10.4. **Tedeschi, L. O.** 2006. Assessment of the adequacy of mathematical models. Agric. Syst. 89 (2-3):225-247. doi: 10.1016/j.agsy.2005.11.004

10.5. **Tedeschi, L. O.**, D. G. Fox, M. J. Baker, and D. P. Kirschten. 2006. Identifying differences in feed efficiency among group-fed cattle. J. Anim. Sci. 84 (3):767-776. doi: 10.2527/2006.843767x

10.6. **Tedeschi, L. O.**, S. Seo, D. G. Fox, and R. Ruiz. 2006. Accounting for energy and protein reserve changes in predicting diet-allowable milk production in cattle. J. Dairy Sci. 89 (12):4795-4807. doi: 10.3168/jds.S0022-0302(06)72529-2

10.7. Vasconcelos, J. T., L. W. Greene, N. A. Cole, M. S. Brown, F. T. McCollum III, and **L. O. Tedeschi**. 2006. Effects of phase feeding of protein on performance, blood urea nitrogen concentration, manure nitrogen:phosphorus ratio, and carcass characteristics of feedlot cattle. J. Anim. Sci. 84 (11):3032-3038. doi: 10.2527/jas.2005-711

11. 2007

11.1. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and D. G. Fox. 2007. The small ruminant nutrition system: Development and evaluation of a goat submodel. Ital. J. Anim. Sci. 6:609-611. doi: 10.4081/ijas.2007.1s.609

11.2. Chizzotti, M. L., S. C. Valadares Filho, **L. O. Tedeschi**, F. H. M. Chizzotti, and G. E. Carstens. 2007. Energy and protein requirements for growth and maintenance of F1 Nellore x Red Angus bulls, steers, and heifers. J. Anim. Sci. 85 (8):1971-1981. doi: 10.2527/jas.2006-632

11.3. de Oliveira, D. E., S. R. de Medeiros, **L. O. Tedeschi**, L. J. M. Aroeira, and S. C. da Silva. 2007. Estimating forage intake of lactating dual-purpose cows using chromium oxide and n-alkanes as external markers. Sci. Agric. 64 (2):103-110. doi: 10.1590/S0103-90162007000200001

11.4. Fernandes, M. H. M. R., K. T. Resende, **L. O. Tedeschi**, J. S. Fernandes, Jr., H. M. Silva, G. E. Carstens, T. T. Berchielli, I. A. M. A. Teixeira, and L. Akinaga. 2007. Energy and protein requirements for maintenance and growth of Boer crossbred kids. J. Anim. Sci. 85 (4):1014-1023. doi: 10.2527/jas.2006-110

11.5. Lanzas, C., C. J. Sniffen, S. Seo, **L. O. Tedeschi**, and D. G. Fox. 2007. A revised CNCPS feed carbohydrate fractionation scheme for formulating rations for ruminants. Anim. Feed Sci. Technol. 136 (3-4):167-190. doi: 10.1016/j.anifeedsci.2006.08.025

11.6. Lanzas, C., **L. O. Tedeschi**, S. Seo, and D. G. Fox. 2007. Evaluation of protein fractionation systems used in formulating rations for dairy cattle. J. Dairy Sci. 90 (1):507-521. doi: 10.3168/jds.S0022-0302(07)72653-X

11.7. Seo, S., C. Lanzas, **L. O. Tedeschi**, and D. G. Fox. 2007. Development of a mechanistic model to represent the dynamics of liquid flow out of the rumen and to predict rate of passage of liquid in dairy cattle. J. Dairy Sci. 90 (2):840-855. doi: 10.3168/jds.S0022-0302(07)71568-0

11.8. Vasconcelos, J. T., **L. O. Tedeschi**, D. G. Fox, M. L. Galyean, and L. W. Greene. 2007. Review: Feeding nitrogen and phosphorus in beef cattle feedlot production to mitigate environmental impacts. Prof. Anim. Scient. 23 (1):8-17. doi: 10.1532/S1080-7446(15)30942-6

11.9. Vasconcelos, J. T., **L. O. Tedeschi**, J. E. Sawyer, and L. W. Greene. 2007. Application of mathematical models to individually allocate feed of group-fed cattle. Prof. Anim. Scient. 23:340-348. doi: 10.15232/S1080-7446(15)30987-6

12. 2008

12.1. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, G. F. Alleoni, R. F. Nardon, and F. D. Resende. 2008. Evaluation of carcass characteristics of Bos indicus and tropical adapted Bos taurus breeds selected for post-weaning weight. J. Anim. Sci. 86:1770-1780. doi: 10.2527/jas.2007-0507

12.2. Chizzotti, F. H. M., O. G. Pereira, **L. O. Tedeschi**, S. C. Valadares Filho, M. L. Chizzotti, M. I. Leão, and D. H. Pereira. 2008. Effects of dietary nonprotein nitrogen on performance, digestibility, ruminal characteristics, and microbial efficiency in crossbred steers. J. Anim. Sci. 86 (5):1173-1181. doi: 10.2527/jas.2006-654

12.3. Chizzotti, M. L., **L. O. Tedeschi**, and S. C. Valadares Filho. 2008. A meta-analysis of energy and protein requirements for maintenance and growth of Nellore cattle. J. Anim. Sci. 86 (7):1588-1597. doi: 10.2527/jas.2007-0309

12.4. Chizzotti, M. L., S. C. Valadares Filho, R. F. D. Valadares, F. H. M. Chizzotti, and **L. O. Tedeschi**. 2008. Determination of creatinine excretion and evaluation of spot urine sampling in Holstein cattle. Livest. Sci. 113:218-225. doi: 10.1016/j.livsci.2007.03.013

12.5. de Oliveira, D. E., M. Q. Manella, **L. O. Tedeschi**, S. C. da Silva, and D. P. D. Lanna. 2008. N-alkanes to estimate voluntary forage intake of cattle using controlled-release capsules. Sci. Agric. 65 (3):230-238. doi: 10.1590/S0103-90162008000300002

12.6. Fernandes, M. H. M. R., K. T. Resende, **L. O. Tedeschi**, J. S. Fernandes, Jr., I. A. M. A. Teixeira, G. E. Carstens, and T. T. Berchielli. 2008. Predicting the chemical composition of the body and the carcass of 3/4Boer x 1/4Saanen kids using body components. Small Ruminant Res. 75:90-98. doi: 10.1016/j.smallrumres.2007.09.005

12.7. Gutiérrez-Bañuelos, H., R. C. Anderson, G. E. Carstens, **L. O. Tedeschi**, W. E. Pinchak, E. Cabrera-Diaz, N. A. Krueger, T. R. Callaway, and D. J. Nisbet. 2008. Effects of nitroethane and monensin on ruminal fluid fermentation characteristics and nitrocompound-degrading bacterial populations. J. Agric. Food Chem. 56 (12):4650-4658. doi: 10.1021/jf800756c

12.8. Ribeiro, F. R. B., **L. O. Tedeschi**, J. R. Stouffer, and G. E. Carstens. 2008. Technical note: A novel technique to assess internal body fat of cattle by using real-time ultrasound. J. Anim. Sci. 86:763-737. doi: 10.2527/jas.2007-0560

12.9. **Tedeschi, L. O.**, A. Cannas, and D. G. Fox. 2008. A nutrition mathematical model to account for dietary supply and requirements of energy and protein for domesticated small ruminants: The development and evaluation of the Small Ruminant Nutrition System. Rev. Bras. Zootec. 37 (SE):178-190. doi: 10.1590/S1516-35982008001300020

12.10. **Tedeschi, L. O.**, W. Chalupa, E. Janczewski, D. G. Fox, C. J. Sniffen, R. Munson, P. J. Kononoff, and R. C. Boston. 2008. Evaluation and application of the CPM Dairy nutrition model. J. Agric. Sci. 146 (2):171-182. doi: 10.1017/S0021859607007587

12.11. Tylutki, T. P., D. G. Fox, V. M. Durbal, **L. O. Tedeschi**, J. B. Russell, M. E. Van Amburgh, T. R. Overton, L. E. Chase, and A. N. Pell. 2008. Cornell Net Carbohydrate and Protein System: A model for precision feeding of dairy cattle. Anim. Feed Sci. Technol. 143 (1-4):174-202. doi: 10.1016/j.anifeedsci.2007.05.010

12.12. Vieira, R. A. M., **L. O. Tedeschi**, and A. Cannas. 2008. A generalized compartmental model to estimate the fibre mass in the ruminoreticulum. 1. Estimating parameters of digestion. J. Theor. Biol. 255 (4):345-356. doi: 10.1016/j.jtbi.2008.08.014

12.13. Vieira, R. A. M., **L. O. Tedeschi**, and A. Cannas. 2008. A generalized compartmental model to estimate the fibre mass in the ruminoreticulum. 2. Integrating digestion and passage. J. Theor. Biol. 255 (4):357-368. doi: 10.1016/j.jtbi.2008.08.0132009

13. 2009

13.1. Chizzotti, F. H. M., O. G. Pereira, S. C. Valadares Filho, M. L. Chizzotti, M. I. Leão, D. H. Pereira, and **L. O. Tedeschi**. 2009. Intake, digestibility, ruminal parameters, and microbial protein synthesis in crossbred steers fed diets based on Brachiaria grass silage and sorghum silage. Arq. Bras. Med. Vet. Zootec. 61 (6):1328-1338. doi: 10.1590/S0102-09352009000600012

13.2. Chizzotti, M. L., S. C. Valadares Filho, **L. O. Tedeschi**, P. V. R. Paulino, M. F. Paulino, R. F. D. Valadares, P. Amaral, P. D. B. Benedeti, T. Ikegami, D. Moura, and M. A. Fonseca. 2009. Net requirements of calcium, magnesium, sodium, phosphorus, and potassium for growth of Nellore × Red Angus bulls, steers, and heifers. Livest. Sci. 124 (1-3):242-247. doi: 10.1016/j.livsci.2009.02.004

13.3. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2009. A dairy goat model to study the impact of management strategies on herd dynamics. Tropical and Subtropical Agroecosystems. 11:115-119.

13.4. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2009. Development of a mathematical model to study the impacts of production and management policies on the herd dynamics and profitability of dairy goats. Agric. Syst. 101:186-196. doi: 10.1016/j.agsy.2009.05.007

13.5. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2009. Study of the impact of breeding seasons in the dynamics of dairy goat herds. Tropical and Subtropical Agroecosystems. 11:121-125.

13.6. Kelzer, J. M., P. J. Kononoff, A. M. Gehman, **L. O. Tedeschi**, K. Karges, and M. L. Gibson. 2009. Effects of feeding three types of corn-milling coproducts on milk production and ruminal fermentation of lactating Holstein cattle. J. Dairy Sci. 92 (10):5120-5132. doi: 10.3168/jds.2009-2208

13.7. Krueger, N. A., R. C. Anderson, **L. O. Tedeschi**, T. R. Callaway, T. S. Edrington, and D. J. Nisbet. 2009. Evaluation of feeding glycerol on free-fatty acid production and

fermentation kinetics of mixed ruminal microbes in vitro. Bioresour. Technol. 101 (21):8469-8472. doi: 10.1016/j.biortech.2010.06.010

13.8. Lancaster, P. A., G. E. Carstens, D. H. Crews, Jr., T. H. Welsh Jr., T. D. A. Forbes, D. W. Forrest, **L. O. Tedeschi**, R. D. Randel, and F. M. Rouquette, Jr. 2009. Phenotypic and genetic relationships of residual feed intake with performance and ultrasound carcass traits in Brangus heifers. J. Anim. Sci. 87 (12):3887-3896. doi: 10.2527/jas.2009-2041

13.9. Lancaster, P. A., G. E. Carstens, F. R. B. Ribeiro, **L. O. Tedeschi**, and D. H. Crews, Jr. 2009. Characterization of feed efficiency traits and relationships with feeding behavior and ultrasound carcass traits in growing bulls. J. Anim. Sci. 87 (4):1528-1539. doi: 10.2527/jas.2008-1352

13.10. Pina, D. d. S., **L. O. Tedeschi**, S. C. Valadares Filho, J. A. G. Azevêdo, E. Detmann, and R. C. Anderson. 2009. Influence of calcium oxide level and time of exposure to sugarcane on in vitro and in situ digestive kinetics. Anim. Feed Sci. Technol. 153 (1-2):101-112. doi: 10.1016/j.anifeedsci.2009.06.005

13.11. Pina, D. d. S., S. C. Valadares Filho, **L. O. Tedeschi**, A. M. Barbosa, and R. F. D. Valadares. 2009. Influence of different levels of concentrate and ruminally undegraded protein on the digestive and physiological parameters in beef heifers. J. Anim. Sci. 87:1058-1067. doi: 10.2527/jas.2008-1069

13.12. Rhoades, R. D., C. H. Ponce, S. B. Smith, A. D. Herring, **L. O. Tedeschi**, D. K. Lunt, D. T. Dean, F. R. B. Ribeiro, C. W. Choi, D. G. Riley, and J. E. Sawyer. 2009. Evaluation of growth-based predictions of carcass fat and marbling at slaughter using ultrasound measurements. Prof. Anim. Scient. 25 (4):434-442. doi: 10.15232/S1080-7446(15)30743-9

13.13. Seo, S., C. Lanzas, **L. O. Tedeschi**, A. N. Pell, and D. G. Fox. 2009. Development of a mechanistic model to represent the dynamics of particle flow out of the rumen and to predict rate of passage rate of particles in dairy cattle. J. Dairy Sci. 92 (8):3981-4000. doi: 10.3168/jds.2006-799

13.14. **Tedeschi, L. O.**, and D. G. Fox. 2009. Predicting milk and forage intake of nursing calves. J. Anim. Sci. 87 (10):3380-3391. doi: 10.2527/jas.2009-2014

13.15. **Tedeschi, L. O.**, P. J. Kononoff, K. Karges, and M. L. Gibson. 2009. Effects of chemical composition variation on the dynamics of ruminal fermentation and biological value of corn milling (co)products. J. Dairy Sci. 92 (1):401-413. doi: 10.3168/jds.2008-1141

13.16. Vasconcelos, J. T., J. E. Sawyer, **L. O. Tedeschi**, F. T. McCollum III, and L. W. Greene. 2009. Effects of different growing diets on performance, carcass characteristics, insulin sensitivity, and accretion of intramuscular and subcutaneous adipose tissue of feedlot cattle. J. Anim. Sci. 87 (4):1540-1547. doi: 10.2527/jas.2008-0934

14. 2010

14.1. Chizzotti, F. H. M., O. G. Pereira, S. C. Valadares Filho, **L. O. Tedeschi**, K. G. Ribeiro, and D. H. Pereira. 2010. Intake, digestibility, and performance of steers fed diets based on two corn silage hybrids and two concentrate levels. Arq. Bras. Med. Vet. Zootec. 62 (4):868-874. doi: 10.1590/S0102-09352010000400016

14.2. de Oliveira, D. E., and **L. O. Tedeschi**. 2010. Comparing plastic syringes and disposable columns to extract n-alkanes in forage and concentrate feeds. Cienc. Rural. 40 (8):1844-1847. doi: 10.1590/S0103-84782010005000128

14.3. Fernandes, H. J., **L. O. Tedeschi**, M. F. Paulino, and L. M. Paiva. 2010. Determination of carcass and body fat compositions of grazing crossbred bulls using body measurements. J. Anim. Sci. 88 (4):1442-1453. doi: 10.2527/jas.2009-1919

14.4. Kelzer, J. M., P. J. Kononoff, **L. O. Tedeschi**, T. C. Jenkins, K. Karges, and M. L. Gibson. 2010. Evaluation of protein fractionation and ruminal and intestinal digestibility of corn milling co-products. J. Dairy Sci. 93 (6):2803-2815. doi: 10.3168/jds.2009-2460

14.5. Magalhães, K. A., S. C. Valadares Filho, E. Detmann, L. L. Diniz, D. d. S. Pina, J. A. G. Azevêdo, F. L. Araújo, M. I. Marcondes, M. A. Fonseca, and **L. O. Tedeschi**. 2010. Evaluation of indirect methods to estimate the nutritional value of tropical feeds for ruminants. Anim. Feed Sci. Technol. 155 (1):44-54. doi: 10.1016/j.anifeedsci.2009.10.004

14.6. McMeniman, J. P., **L. O. Tedeschi**, P. J. Defoor, and M. L. Galyean. 2010. Development and evaluation of feeding-period average dry matter intake prediction equations from a commercial feedlot database. J. Anim. Sci. 88 (9):3009-3017. doi: 10.2527/jas.2009-2626

14.7. Pagán-Riestra, S., J. P. Muir, B. D. Lambert, **L. O. Tedeschi**, and L. Redmon. 2010. Phosphorus and other nutrient disappearance from plants containing condensed tannins using the mobile nylon bag technique. Anim. Feed Sci. Technol. 156 (1-2):19-25. doi: 10.1016/j.anifeedsci.2009.12.006

14.8. **Tedeschi, L. O.**, A. Cannas, and D. G. Fox. 2010. A nutrition mathematical model to account for dietary supply and requirements of energy and nutrients for domesticated small ruminants: The development and evaluation of the Small Ruminant Nutrition System. Small Ruminant Res. 89 (2-3):174-184. doi: 10.1016/j.smallrumres.2009.12.041

14.9. Williams, W. L., **L. O. Tedeschi**, P. J. Kononoff, T. R. Callaway, S. E. Dowd, K. Karges, and M. L. Gibson. 2010. Evaluation of in vitro gas production and rumen bacterial populations fermenting corn milling (co)products. J. Dairy Sci. 93 (10):4735-4743. doi: 10.3168/jds.2009-2920

15. 2011 (Associate Professor at TAMU)

15.1. Aguiar, A. D., **L. O. Tedeschi**, F. M. Rouquette, Jr., K. C. McCuistion, J. A. Ortega-Santos, R. C. Anderson, D. DeLaney, and S. Moore. 2011. Determination of nutritive value of forages in south Texas using an in vitro gas production technique. Gass Forage Sci. 66 (4):526-540. doi: 10.1111/j.1365-2494.2011.00809.x

15.2. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, R. F. Nardon, L. A. Figueiredo, and G. F. Alleoni. 2011. Chemical composition of whole body and carcass of Bos indicus and tropically adapted Bos taurus breeds. J. Anim. Sci. 89 (9):2859-2866. doi: 10.2527/jas.2010-3649

15.3. Chay-Canul, A. J., A. J. Ayala-Burgos, J. C. Ku-Vera, J. G. Magaña-Monforte, and **L. O. Tedeschi**. 2011. The effects of metabolizable energy intake on body fat depots of adult Pelibuey ewes fed roughage diets under tropical conditions. Trop Anim Health Prod. 43 (5):929-936. doi: 10.1007/s11250-011-9785-5

15.4. Gutiérrez-Bañuelos, H., W. E. Pinchak, B. R. Min, G. E. Carstens, R. C. Anderson, **L. O. Tedeschi**, W. K. Krueger, N. A. Krueger, P. A. Lancaster, and R. R. Gomez. 2011. Effects of feed-supplementation and hide-spray application of two sources of tannins on enteric and hide bacteria of feedlot cattle. Journal of Environmental Science and Health, Part B. 46 (4):360-365. doi: 10.1080/03601234.2011.559419

15.5. Mendes, E. D. M., G. E. Carstens, **L. O. Tedeschi**, W. E. Pinchak, and T. H. Friend. 2011. Validation of a system for monitoring feeding behavior in beef cattle. J. Anim. Sci. 89 (9):2904-2910. doi: 10.2527/jas.2010-3489

15.6. Parsons, D., C. F. Nicholson, R. W. Blake, Q. M. Ketterings, L. Ramírez-Avilés, D. G. Fox, **L. O. Tedeschi**, and J. H. Cherney. 2011. Development and evaluation of an integrated simulation model for assessing smallholder crop-livestock production in Yucatán, Mexico. Agric. Syst. 104 (1):1-12. doi: 10.1016/j.agsy.2010.07.006

15.7. Pina, D. d. S., S. C. Valadares Filho, **L. O. Tedeschi**, A. M. Barbosa, J. A. G. Azevêdo, R. F. D. Valadares, N. K. de Paiva Souza, and M. A. Fonseca. 2011. Levels of inclusion and exposure time of sugarcane to calcium oxide on digestive parameters and performance of Nellore heifers. Rev. Bras. Zootec. 40 (3):648-656. doi: 10.1590/S1516-35982011000300025

15.8. Ribeiro, F. R. B., **L. O. Tedeschi**, R. D. Rhoades, S. B. Smith, S. E. Martin, and S. F. Crouse. 2011. Evaluating the application of dual X-ray energy absorptiometry to assess dissectible and chemical fat and muscle from the 9th-to-11th rib section of beef cattle. Prof. Anim. Scient. 27:472-476. doi: 10.15232/S1080-7446(15)30521-0

15.9. **Tedeschi, L. O.**, T. R. Callaway, J. P. Muir, and R. Anderson. 2011. Potential environmental benefits of feed additives and other strategies for ruminant production. Rev. Bras. Zootec. 40 (Suppl. Especial):291-309.

15.10. **Tedeschi, L. O.**, C. F. Nicholson, and E. Rich. 2011. Using System Dynamics modelling approach to develop management tools for animal production with emphasis on small ruminants. Small Ruminant Res. 98 (1-3):102-110. doi: 10.1016/j.smallrumres.2011.03.026

16. 2012

16.1. Allen, C. C., B. R. C. Alves, X. Li, **L. O. Tedeschi**, H. Zhou, J. C. Paschal, P. K. Riggs, U. M. Braga-Neto, D. H. Keisler, G. L. Williams, and M. Amstalden. 2012. Gene expression in the arcuate nucleus of heifers is affected by controlled intake of high- and low-concentrate diets. J. Anim. Sci. 90 (7):2222-2232. doi: 10.2527/jas.2011-4684

16.2. Bailey, J. C., **L. O. Tedeschi**, E. D. M. Mendes, J. E. Sawyer, and G. E. Carstens. 2012. Technical Note: Evaluation of bimodal distribution models to determine meal criterion in heifers fed a high-grain diet. J. Anim. Sci. 90 (8):2750-2753. doi: 10.2527/jas.2011-4634

16.3. Bonilha, S. F. M., **L. O. Tedeschi**, L. A. Figueiredo, R. H. Branco, J. N. S. G. Cyrillo, and M. E. Z. Marcadante. 2012. Características de carcaça de bovinos Nelore, Caracu, Guzerá e Gir selectionados para peso pós-desmama. B. Indústr. Anim. 69 (1):63-69.

16.4. Bourg, B. M., **L. O. Tedeschi**, T. A. Wickersham, and J. M. Tricarico. 2012. Effects of a slow-release urea product on performance, carcass characteristics, and nitrogen balance of steers fed steam-flaked corn. J. Anim. Sci. 90 (11):3914-3923. doi: 10.2527/jas.2011-4832

16.5. Crossland, W. L., **L. O. Tedeschi**, T. R. Callaway, P. J. Kononoff, and K. Karges. 2012. Developing an in vitro method for determining feed soluble protein degradation rate by mixed ruminal microorganisms. Agric. Food Anal. Bacteriol. 2 (4):246-252.

16.6. de Oliveira, D. E., M. Gama, D. Fernandes, **L. O. Tedeschi**, and D. E. Bauman. 2012. An unprotected conjugated linoleic acid (CLA) supplement reduces milk production and secretion of milk components in grazing dairy ewes. J. Dairy Sci. 95 (3):1437-1446. doi: 10.3168/jds.2011-4618

16.7. Duarte-Vera, F., C. A. Sandoval-Castro, L. A. Sarmiento-Franco, R. Santos-Ricalde, and **L. O. Tedeschi**. 2012. Energy and protein requirements of growing Pelibuey sheep under tropical conditions estimated from a literature database analyses. Tropical and Subtropical Agroecosystems. 15 (1):97-103.

16.8. Fernandes, H. J., **L. O. Tedeschi**, M. F. Paulino, E. Detman, L. M. Paiva, S. C. Valadares Filho, A. Gomes da Silva, and J. A. G. Azevêdo. 2012. Evaluation of mathematical models to describe growth of grazing young bulls. Rev. Bras. Zootec. 41 (2):367-373. doi: 10.1590/S1516-35982012000200020

16.9. Fernandes, M. H. M. R., K. T. Resende, **L. O. Tedeschi**, I. A. M. A. Teixeira, and J. S. Fernandes. 2012. Macromineral requirements for the maintenance and growth of Boer crossbred kids. J. Anim. Sci. 90 (12):4458-4466. doi: 10.2527/jas.2011-4954

16.10. Marcondes, M. I., **L. O. Tedeschi**, S. C. Valadares Filho, and M. L. Chizzotti. 2012. Prediction of physical and chemical body compositions of purebred and crossbred Nellore cattle using the composition of a rib section. J. Anim. Sci. 90 (4):1280-1290. doi: 10.2527/jas.2011-3839

16.11. Morenz, M. J. F., J. F. Coelho da Silva, L. J. M. Aroeira, F. Deresz, H. M. Vásquez, F. C. F. Lopes, D. S. C. Paciullo, and **L. O. Tedeschi**. 2012. Evaluation of the Cornell Net Carbohydrate and Protein System model on the prediction of dry matter intake and milk production of grazing crossbred cows. Rev. Bras. Zootec. 41 (2):398-506. doi: 10.1590/S1516-35982012000200024

16.12. Parsons, D., N. H. Van, A. E. O. Malau-Aduli, N. X. Ba, L. D. Phung, P. A. Lane, L. D. Ngoan, and **L. O. Tedeschi**. 2012. Evaluation of a nutrition model in predicting performance of Vietnamese cattle. Asian Austalas. J. Anim. Sci. 25 (9):1237-1247. doi: 10.5713/ajas.2012.12036

16.13. Ramirez-Ramirez, H. A., K. Nestor, **L. O. Tedeschi**, T. R. Callaway, S. E. Dowd, S. C. Fernando, and P. J. Kononoff. 2012. The effect of brown midrib corn silage and dried distillers' grains with solubles on milk production, nitrogen utilization and microbial community structure in dairy cows. Can. J. Anim. Sci. 92 (3):365-380. doi: 10.4141/cjas2011-133

16.14. Ribeiro, F. R. B., and **L. O. Tedeschi**. 2012. Using real-time ultrasound and carcass measurements to estimate total internal fat in beef cattle over different breed types and managements. J. Anim. Sci. 90 (9):3259-3265. doi: 10.2527/jas.2011-4697

16.15. **Tedeschi, L. O.**, A. Cannas, S. G. Solaiman, R. A. M. Vieira, and N. K. Gurung. 2012. Development and evaluation of empirical equations to predict ruminal fractional passage rate of forages in goats. J. Agric. Sci. 150 (1):95-107. doi: 10.1017/S0021859611000591

16.16. Vieira, R. A. M., P. R. d. S. Campos, J. F. Coelho da Silva, **L. O. Tedeschi**, and W. P. Tamy. 2012. Heterogeneity of the digestible insoluble fibre of selected forages in situ. Anim. Feed Sci. Technol. 171 (2-4):154-166. doi: 10.1016/j.anifeedsci.2011.11.001

17. 2013

17.1. Aguiar, A. D., T. D. A. Forbes, F. M. Rouquette, Jr., **L. O. Tedeschi**, and R. D. Randel. 2013. Evaluating the statistical variation in estimating forage dry matter intake of grazing Brahman bulls using n-alkanes. J. Agric. Sci. 151:129-140. doi: 10.1017/S0021859612000354

17.2. Atzori, A. S., **L. O. Tedeschi**, and A. Cannas. 2013. A multivariate and stochastic approach to identify key variables to rank dairy farms on profitability. J. Dairy Sci. 96 (5):3378-3387. doi: 10.3168/jds.2012-6256

17.3. Cordero, V. V., C. A. Cavinder, **L. O. Tedeschi**, D. H. Sigler, M. M. Vogelsang, and C. E. Arnold. 2013. The development and evaluation of a mathematical nutrition model to predict digestible energy intake of broodmares based on body condition changes. J. Anim. Sci. 91 (5):2169-2177. doi: 10.2527/jas.2011-4659

17.4. de Paula, N. F., **L. O. Tedeschi**, M. F. Paulino, H. J. Fernandes, and M. A. Fonseca. 2013. Predicting carcass and body fat composition using biometric measurements of grazing beef cattle. J. Anim. Sci. 91 (7):3341-3351. doi: 10.2527/jas.2012-5233

17.5. Hafla, A. N., G. E. Carstens, T. D. A. Forbes, **L. O. Tedeschi**, J. C. Bailey, J. T. Walter, and J. R. Johnson. 2013. Relationships between postweaning residual feed intake in heifers and forage use, body composition, feeding behavior, physical activity, and heart rate of pregnant beef females. J. Anim. Sci. 91 (11):5353-5365. doi: 10.2527/jas.2013-6423

17.6. Marcondes, M. I., **L. O. Tedeschi**, S. C. Valadares Filho, and M. P. Gionbelli. 2013. Predicting efficiency of use of metabolizable energy to net energy for gain and maintenance of Nellore cattle. J. Anim. Sci. 91 (10):4887-4898. doi: 10.2527/jas.2011-4051

17.7. Naumann, H. D., J. P. Muir, B. D. Lambert, **L. O. Tedeschi**, and M. M. Kothmann. 2013. Condensed tannins in the ruminant environment: A perspective on biological activity. J. Agric. Sciences. 1 (1):8-20.

17.8. Naumann, H. D., **L. O. Tedeschi**, J. P. Muir, B. D. Lambert, and M. M. Kothmann. 2013. Effect of molecular weight of condensed tannins from warm-season perennial legumes on ruminal methane production in vitro. Biochem. Syst. Ecol. 50 (4):154-162. doi: 10.1016/j.bse.2013.03.050

17.9. **Tedeschi, L. O.**, D. G. Fox, and P. J. Kononoff. 2013. A dynamic model to predict fat and protein fluxes associated with body reserve changes in cattle. J. Dairy Sci. 96 (4):2448-2463. doi: 10.3168/jds.2012-6070

17.10. Turner, B. L., R. D. Rhoades, **L. O. Tedeschi**, R. D. Hanagriff, K. C. McCuistion, and B. H. Dunn. 2013. Analyzing ranch profitability from varying cow sales and heifer replacement rates for beef cow-calf production using system dynamics. Agric. Syst. 114:6-14. doi: 10.1016/j.agsy.2012.07.009

18. 2014

18.1. Cardoso, R. C., B. R. C. Alves, L. D. Prezotto, J. F. Thorson, **L. O. Tedeschi**, D. H. Keisler, M. Amstalden, and G. L. Williams. 2014. Reciprocal changes in leptin and NPY during nutritional acceleration of puberty in heifers. J. Endocrinol. 223 (3):289-298. doi: 10.1530/joe-14-0504

18.2. Cardoso, R. C., B. R. C. Alves, L. D. Prezotto, J. F. Thorson, **L. O. Tedeschi**, D. H. Keisler, C. S. Park, M. Amstalden, and G. L. Williams. 2014. Use of a stair-step compensatory gain nutritional regimen to program the onset of puberty in beef heifers. J. Anim. Sci. 92 (7):2942-2949. doi: 10.2527/jas.2014-7713

18.3. Chay-Canul, A. J., J. C. Espinoza-Hernandez, A. J. Ayala-Burgos, J. G. Magaña-Monforte, C. F. Aguilar-Perez, M. L. Chizzotti, **L. O. Tedeschi**, and J. C. Ku-Vera. 2014. Relationship of empty body weight with shrunken body weight and carcass weights in adult Pelibuey ewes at different physiological states. Small Ruminant Res. 117 (1):10-14. doi: 10.1016/j.smallrumres.2013.11.019

18.4. Galvani, D. B., A. V. Pires, I. Susin, V. N. Gouvêa, A. Berndt, L. J. Chagas, J. R. R. Dórea, A. L. Abdalla, and **L. O. Tedeschi**. 2014. Energy efficiency of growing ram lambs fed concentrate-based diets with different roughage sources. J. Anim. Sci. 92 (1):250-263. doi: 10.2527/jas.2012-6017

18.5. Galyean, M. L., and **L. O. Tedeschi**. 2014. Predicting microbial protein synthesis in beef cattle: Relationship to intakes of total digestible nutrients and crude protein. J. Anim. Sci. 92 (11):5099-5111. doi: 10.2527/jas.2014-8098

18.6. McCann, J. C., L. M. Wiley, T. D. A. Forbes, F. M. Rouquette, Jr., and **L. O. Tedeschi**. 2014. Relationship between the rumen microbiome and residual feed intake-efficiency of Brahman bulls stocked on Bermudagrass pastures. PLoS ONE. 9 (3):e91864. doi: 10.1371/journal.pone.0091864

18.7. McCuistion, K., M. Grigar, D. Wester, R. Rhoades, C. Mathis, and **L. Tedeschi**. 2014. Can we predict forage nutritive value with weather parameters? Rangelands. 36 (1):1-7.

18.8. Naumann, H. D., S. A. Armstrong, B. D. Lambert, J. P. Muir, **L. O. Tedeschi**, and M. M. Kothmann. 2014. Effect of molecular weight and concentration of legume condensed tannins on in vitro larval migration inhibition of Haemonchus contortus. Vet. Parasitol. 199 (1–2):93-98. doi: 10.1016/j.vetpar.2013.09.025

18.9. Naumann, H. D., A. E. Hagerman, B. D. Lambert, J. P. Muir, **L. O. Tedeschi**, and M. M. Kothmann. 2014. Molecular weight and protein-precipitating ability of condensed tannins from warm-season perennial legumes. J. Plant Interact. 9 (1):212-219. doi: 10.1080/17429145.2013.811547

18.10. Portillo, O. R., R. Clara-Valencia, J. Ramírez, R. Estebez, M. Hernández, A. Morán, R. Obando, N. Gutiérrez, R. Tinoco-Mora, N. De Gracia, D. Herrera, **L. Tedeschi**, and W. L. Rooney. 2014. Registration of 'CI0947bmr' Sorghum. Journal of Plant Registrations. 8 (3):257-261. doi: 10.3198/jpr2013.10.0065crc

18.11. Regadas Filho, J. G. L., **L. O. Tedeschi**, A. Cannas, R. A. M. Vieira, and M. T. Rodrigues. 2014. Using the Small Ruminant Nutrition System to develop and evaluate an alternative approach to estimating the dry matter intake of goats when accounting for ruminal fiber stratification. J. Dairy Sci. 97 (11):7185-7196. doi: 10.3168/jds.2014-8632

18.12. Regadas Filho, J. G. L., **L. O. Tedeschi**, M. T. Rodrigues, L. F. Brito, and T. S. Oliveira. 2014. Comparison of growth curves of two genotypes of dairy goats using nonlinear mixed models. J. Agric. Sci. 152 (05):829-842. doi: 10.1017/S0021859613000798

18.13. Regadas Filho, J. G. L., **L. O. Tedeschi**, R. A. M. Vieira, and M. T. Rodrigues. 2014. Assessment of the heterogeneous ruminal fiber pool and development of a mathematical approach for predicting the mean retention time of feeds in goats. J. Anim. Sci. 92 (3):1099-1109. doi: 10.2527/jas.2013-6866

18.14. **Tedeschi, L. O.**, L. F. L. Cavalcanti, M. A. Fonseca, M. Herrero, and P. K. Thornton. 2014. The evolution and evaluation of dairy cattle models for predicting milk production: an agricultural model intercomparison and improvement project (AgMIP) for livestock. Anim. Prod. Sci. 54 (12):2052-2067. doi: 10.1071/AN14620

18.15. **Tedeschi, L. O.**, C. A. Ramírez-Restrepo, and J. P. Muir. 2014. Developing a conceptual model of possible benefits of condensed tannins for ruminant production. Animal. 8 (7):1095-1105. doi: 10.1017/S1751731114000974

18.16. Vargas-Villamil, L. M., and **L. O. Tedeschi**. 2014. Potential integration of multi-fitting, inverse problem and mechanistic modelling approaches to applied research in animal science: a review. Anim. Prod. Sci. 54 (12):1905-1913. doi: 10.1071/AN14568

19. 2015

19.1. Alves, B. R. C., R. C. Cardoso, L. D. Prezotto, J. F. Thorson, M. Bedenbaugh, S. M. Sharpton, A. Caraty, D. H. Keisler, **L. O. Tedeschi**, G. L. Williams, and M. Amstalden. 2015. Elevated body weight gain during the juvenile alters neuropeptide Y-gonadotropin-releasing hormone circuitry in prepubertal heifers. Biol. Reprod. 92 (2):1-10. doi: 10.1095/biolreprod.114.124636

19.2. Chizzotti, F. H. M., O. G. Pereira, S. C. V. Filho, M. L. Chizzotti, R. T. S. Rodrigues, **L. O. Tedeschi**, and T. C. Silva. 2015. Does sugar cane ensiled with calcium oxide affect intake, digestibility, performance, and microbial efficiency in beef cattle? Anim. Feed Sci. Technol. 203:23-32. doi: 10.1016/j.anifeedsci.2014.12.014

19.3. Fonseca, M. A., S. C. Valadares Filho, **L. O. Tedeschi**, M. L. Chizzotti, M. G. Machado, and D. C. Abreu. 2015. Evaluation of predictive equations developed to assess body composition of F1 Nellore × Angus bulls and steers. Anim. Prod. Sci. 55 (8):978-987. doi: 10.1071/AN13439

19.4. Henrique, W., A. S. Ferraudo, A. A. M. Sampaio, D. Perecin, T. M. da Silva, and **L. O. Tedeschi**. 2015. Agrupamento hierárquico, não hierárquico e redes neurais artificiais na caracterização de grupos de bovinos machos terminados em confinamento. B. Indústr. Anim. 72 (1):41-50.

19.5. Naumann, H. D., B. D. Lambert, S. A. Armstrong, M. A. Fonseca, **L. O. Tedeschi**, J. P. Muir, and M. R. Ellersieck. 2015. Effect of replacing alfalfa with panicled-tick clover or sericea lespedeza in corn-alfalfa-based substrates on in vitro ruminal methane production. J. Dairy Sci. 98 (6):3980-3987. doi: 10.3168/jds.2014-8836

19.6. Naumann, H. D., **L. O. Tedeschi**, and M. A. Fonseca. 2015. Technical Note: Predicting ruminal methane inhibition by condensed tannins using nonlinear exponential decay regression analysis. J. Anim. Sci. 93 (11):5341-5345. doi: 10.2527/jas.2015-9434

19.7. Oliveira, D. E., S. R. Medeiros, **L. O. Tedeschi**, S. C. Silva, and D. P. D. Lanna. 2015. Fecal N-Alkanes variation in lactating dairy cows grazing a tropical pasture (*Cynodon nlemfüensis* Vanderyst var. Nlemfüensis). Tropical and Subtropical Agroecosystems. 18 (3):313-321.

19.8. **Tedeschi, L. O.** 2015. Integrating genomics with nutrition models to improve the prediction of cattle performance and carcass composition under feedlot conditions. PLoS ONE. 10 (11):e0143483. doi: 10.1371/journal.pone.0143483

19.9. **Tedeschi, L. O.**, D. G. Fox, M. A. Fonseca, and L. F. L. Cavalcanti. 2015. Invited Review: Models of protein and amino acid requirements for cattle. Rev. Bras. Zootec. 44 (3):109-132. doi: 10.1590/S1806-92902015000300005

19.10. **Tedeschi, L. O.**, J. P. Muir, D. G. Riley, and D. G. Fox. 2015. The role of ruminant animals in sustainable livestock intensification programs. Int. J. Sustainable Dev. World Ecol. 22 (5):452-465. doi: 10.1080/13504509.2015.1075441

20. 2016 (Professor at TAMU)

20.1. Almeida, A. K., K. T. Resende, **L. O. Tedeschi**, M. H. M. R. Fernandes, J. G. L. Regadas Filho, and I. A. M. A. Teixeira. 2016. Using body composition to determine weight at maturity of male and female Saanen goats. J. Anim. Sci. 94 (6):2564-2571. doi: 10.2527/jas.2015-0060

20.2. Buttrey, E. K., K. H. Jenkins, F. T. McCollum, N. A. Cole, **L. O. Tedeschi**, and J. C. MacDonald. 2016. Effects of sorghum wet distillers' grains plus solubles in steam-flaked corn–based finishing diets on steer performance, carcass characteristics, and digestibility characteristics. The Professional Animal Scientist. 32 (6):768-776. doi: 10.15232/pas.2016-01530

20.3. Chay-Canul, A. J., J. G. Magaña-Monforte, M. L. Chizzotti, A. T. Piñeiro-Vázquez, J. R. Canul-Solís, A. J. Ayala-Burgos, J. C. Ku-Vera, and **L. O. Tedeschi**. 2016. Requerimientos energéticos de ovinos de pelo en las regiones tropicales de Latinoamérica. Revisión (Energy requirements of hair sheep in the tropical regions of Latin America. Review). Rev. Mex. Cienc. Pecu. 7 (1):105-125.

20.4. Eisemann, J. H., and **L. O. Tedeschi**. 2016. Predicting the amount of urea nitrogen recycled and used for anabolism in growing cattle. J. Agric. Sci. 154 (06):1118-1129. doi: 10.1017/S0021859616000228

20.5. Galyean, M. L., N. A. Cole, **L. O. Tedeschi**, and M. E. Branine. 2016. BOARD-INVITED REVIEW: Efficiency of converting digestible energy to metabolizable energy and reevaluation of the California Net Energy System maintenance requirements and equations for predicting dietary net energy values for beef cattle. J. Anim. Sci. 94 (4):1329-1341. doi: 10.2527/jas.2015-0223

20.6. Jackson, K. S., G. E. Carstens, **L. O. Tedeschi**, and W. E. Pinchak. 2016. Changes in feeding behavior patterns and dry matter intake before clinical symptoms associated with bovine respiratory disease in growing bulls. J. Anim. Sci. 94 (4):1644-1652. doi: 10.2527/jas.2015-9993

20.7. Marcondes, M. I., **L. O. Tedeschi**, S. d. C. V. Filho, L. F. Costa e Silva, and A. Lopes da Silva. 2016. Using growth and body composition to determine weight at maturity in Nellore cattle. Anim. Prod. Sci. 56 (7):1121-1129. doi: 10.1071/AN14750

20.8. Santos Neto, J. M., K. T. Resende, I. A. M. A. Teixeira, J. A. C. Vargas, A. R. C. Lima, R. F. Leite, F. O. M. Figueiredo, **L. O. Tedeschi**, and M. H. M. R. Fernandes. 2016. Net macromineral requirements in male and female Saanen goats. J. Anim. Sci. 94 (8):3409-3419. doi: 10.2527/jas.2016-0350

20.9. Turner, B. L., H. M. Menendez, R. Gates, **L. O. Tedeschi**, and A. S. Atzori. 2016. System dynamics modeling for agricultural and natural resource management issues: Review of some past cases and forecasting future roles. Resources. 5 (4):40. doi: 10.3390/resources5040040

20.10. Turner, B. L., M. Wuellner, T. Nichols, R. Gates, **L. O. Tedeschi**, and B. H. Dunn. 2016. Development and evaluation of a system dynamics model for investigating agriculturally driven land transformation in the north central United States. Natural Resource Modeling. 29 (2):179-228. doi: 10.1111/nrm.12087

20.11. Wiley, L. M., **L. O. Tedeschi**, T. D. A. Forbes, and F. M. Rouquette. 2016. Relationships between restricted residual feed intake of Brahman bulls measured in confinement and under different stocking intensities on Coastal bermudagrass pastures. Prof. Anim. Scient. 32 (5):605-618. doi: 10.15232/pas.2015-01476

21. 2017

21.1. Allen, C. C., **L. O. Tedeschi**, D. H. Keisler, R. C. Cardoso, B. R. C. Alves, M. Amstalden, and G. L. Williams. 2017. Interaction of dietary energy source and body weight gain during the juvenile period on metabolic endocrine status and age at puberty in beef heifers. J. Anim. Sci. 95 (5):2080-2088. doi: 10.2527/jas.2016.1002

21.2. Bautista-Díaz, E., R. Salazar-Cuytun, A. J. Chay-Canul, R. A. Garcia Herrera, Á. T. Piñeiro-Vázquez, J. G. Magaña Monforte, **L. O. Tedeschi**, A. Cruz-Hernández, and A. Gómez-Vázquez. 2017. Determination of carcass traits in Pelibuey ewes using biometric measurements. Small Ruminant Res. 147:115-119. doi: 10.1016/j.smallrumres.2016.12.037

21.3. Crossland, W. L., **L. O. Tedeschi**, T. R. Callaway, M. D. Miller, W. B. Smith, and M. Cravey. 2017. Effects of rotating antibiotic and ionophore feed additives on volatile fatty acid production, potential for methane production, and microbial populations of steers consuming a moderate-forage diet. J. Anim. Sci. 95 (10):4554-4567. doi: 10.2527/jas2017.1665

21.4. Dubeux, J. C. B., Jr., L. E. Sollenberger, J. P. Muir, **L. O. Tedeschi**, M. V. F. dos Santos, M. V. da Cunha, A. C. L. de Mello, and N. DiLorenzo. 2017. Sustainable

intensification of livestock production on pastures. Archivos Latinoamericanos de Producción Animal. 25 (3-4):97-111.

21.5. Falls, M., D. Meysing, C. Liang, M. N. Karim, G. Carstens, **L. O. Tedeschi**, and M. T. Holtzapple. 2017. Development of highly digestible animal feed from lignocellulosic biomass Part 2: Oxidative lime pretreatment (OLP) and shock treatment of corn stover. Transl. An. Sci. 1 (2):215-220. doi: 10.2527/tas2017.0025

21.6. Falls, M., D. Meysing, S. Lonkar, C. Liang, M. N. Karim, G. Carstens, **L. O. Tedeschi**, and M. T. Holtzapple. 2017. Development of highly digestible animal feed from lignocellulosic biomass Part 1: Oxidative lime pretreatment (OLP) and ball milling of forage sorghum. Transl. An. Sci. 1 (2):208-214. doi: 10.2527/tas2017.0024

21.7. Ferro, M. M., **L. O. Tedeschi**, and A. S. Atzori. 2017. The comparison of the lactation and milk yield and composition of selected breeds of sheep and goats. Transl. An. Sci. 1 (4):498-506. doi: 10.2527/tas2017.0056

21.8. Fidelis, H. A., S. F. M. Bonilha, **L. O. Tedeschi**, R. H. Branco, J. N. S. G. Cyrillo, and M. E. Z. Mercadante. 2017. Residual feed intake, carcass traits and meat quality in Nellore cattle. Meat Sci. 128:34-39. doi: 10.1016/j.meatsci.2017.02.004

21.9. Fonseca, M. A., **L. O. Tedeschi**, S. C. V. Filho, N. F. De Paula, L. D. Silva, and D. F. T. Sathler. 2017. Evaluation of equations to estimate body composition in beef cattle using live, linear and standing-rib cut measurements. Anim. Prod. Sci. 57 (2):378-390. doi: 10.1071/AN15312

21.10. Fonseca, M. A., **L. O. Tedeschi**, S. C. Valadares Filho, N. F. de Paula, F. A. Villadiego, J. Silva Junior, D. Abreu, and M. L. Chizzotti. 2017. Assessment of body fat composition in crossbred Nellore x Angus using biometric measurements. J. Anim. Sci. 95 (12):5584-5596. doi: 10.2527/jas2017.1840

21.11. Freua, M. C., M. H. d. A. Santana, R. V. Ventura, **L. O. Tedeschi**, and J. B. S. Ferraz. 2017. Using a system of differential equations that models cattle growth to uncover the genetic basis of complex traits. J. Appl. Genetics. 58 (3):393-400. doi: 10.1007/s13353-017-0395-4

21.12. Muir, J. P., **L. O. Tedeschi**, J. C. B. Dubeux, Jr., M. Peters, and S. Burkart. 2017. Enhancing food security in Latin America with forage legumes. Archivos Latinoamericanos de Producción Animal. 25 (3-4):113-130.

21.13. Naumann, H. D., L. O. Tedeschi, W. E. Zeller, and N. F. Huntley. 2017. The role of condensed tannins in ruminant animal production: advances, limitations, and future directions. Rev. Bras. Zootec. 46 (12):929-949. doi: 10.1590/s1806-92902017001200009

21.14. Riggs, P. K., **L. O. Tedeschi,** N. D. Turner, U. Braga-Neto, and A. Jayaraman. 2017. The role of "omics" technologies for livestock sustainability. Archivos Latinoamericanos de Producción Animal. 25 (3-4):147-153.

21.15. Ruiz, R., **L. O. Tedeschi**, and A. Sepúlveda. 2017. Investigation of the effect of pegbovigrastim on some periparturient immune disorders and performance in Mexican dairy herds. J. Dairy Sci. 100 (4):3305-3317. doi: 10.3168/jds.2016-12003

21.16. Selim, A. S. M., M. M. Rahman, M. Jahan, S. A. M. Hoque, M. E. Rabbi, M. D. Hossain, M. Fonseca, W. L. Crossland, and **L. O. Tedeschi**. 2017. Assessment of the digestibility of probiotic treated rice straw using in vitro gas production technique. Indian J. Anim. Nutr. 34 (4):389-395. doi: 10.5958/2231-6744.2017.00062.7

21.17. Smith, W. B., J. L. Foster, K. C. McCuistion, **L. O. Tedeschi**, and F. M. Rouquette. 2017. In situ degradation patterns of 'tifton 85' bermudagrass with dried distillers'

grains supplementation. Crop Sci. 57 (3):1773-1783. doi: 10.2135/cropsci2016.12.0981

21.18. **Tedeschi, L. O.**, A. K. Almeida, A. S. Atzori, J. P. Muir, M. A. Fonseca, and A. Cannas. 2017. A glimpse of the future in animal nutrition science. 1. Past and future challenges. Rev. Bras. Zootec. 46 (5):438-451. doi: 10.1590/s1806-92902017000500011

21.19. **Tedeschi, L. O.**, M. A. Fonseca, J. P. Muir, D. P. Poppi, G. E. Carstens, J. P. Angerer, and D. G. Fox. 2017. A glimpse of the future in animal nutrition science. 2. Current and future solutions. Rev. Bras. Zootec. 46 (5):452-469. doi: 10.1590/s1806-92902017000500012

21.20. **Tedeschi, L. O.**, M. L. Galyean, and K. E. Hales. 2017. Recent advances in estimating protein and energy requirements of ruminants. Anim. Prod. Sci. 57 (11):2237-2249. doi: 10.1071/AN17341

21.21. Turner, B. L., M. Wuellner, T. Nichols, R. Gates, **L. O. Tedeschi**, and B. H. Dunn. 2017. A systems approach to forecast agricultural land transformation and soil environmental risk from economic, policy, and cultural scenarios in the north central United States (2012–2062). International Journal of Agricultural Sustainability. 15 (2):102-123. doi: 10.1080/14735903.2017.1288029

21.22. Weiss, C. P., W. W. Gentry, C. M. Meredith, B. E. Meyer, N. A. Cole, **L. O. Tedeschi**, F. T. McCollum, and J. S. Jennings. 2017. Effects of roughage inclusion and particle size on digestion and ruminal fermentation characteristics of beef steers. J. Anim. Sci. 95 (4):1707-1714. doi: 10.2527/jas.2016.1330

22. 2018

22.1. Asher, A., A. Shabtay, M. Cohen-Zinder, Y. Aharoni, J. Miron, R. Agmon, I. Halachmi, A. Orlov, A. Haim, **L. O. Tedeschi**, G. E. Carstens, K. A. Johnson, and A. Brosh. 2018. Consistency of feed efficiency ranking and mechanisms associated with inter-animal variation among growing calves. J. Anim. Sci. 96 (3):990-1009. doi: 10.1093/jas/skx045

22.2. Corte, R. R., F. O. Brito, P. R. Leme, A. S. C. Pereira, J. E. Freitas, F. P. Rennó, S. L. Silva, **L. O. Tedeschi**, and J. C. M. Nogueira Filho. 2018. The effects of partial substitution of soybean with urea or slow-release urea on finishing performance, meat quality, and digestion parameters of Nellore steers. Anim. Prod. Sci. 58 (12):2242-2248. doi: 10.1071/AN16609

22.3. Crossland, W. L., A. B. Norris, **L. O. Tedeschi**, and T. R. Callaway. 2018. Effects of active dry yeast on ruminal pH characteristics and energy partitioning of finishing steers under thermoneutral or heat-stressed environment. J. Anim. Sci. 96 (7):2861-2876. doi: 10.1093/jas/sky165

22.4. da Freiria, L. B., J. T. Zervoudakis, N. F. de Paula, L. da Silva Cabral, **L. O. Tedeschi**, P. I. J. L. da Rosa e Silva, A. C. B. Melo, and A. J. Possamai. 2018. Do fibrolytic, proteolytic and amylolytic enzymes influence the in vitro fermentation characteristics of forage? Ciências Agrárias. 39 (3):1143-1154. doi: 10.5433/1679-0359.2018v39n3p1143

22.5. da Freiria, L. B., J. T. Zervoudakis, N. F. de Paula, L. d. S. Cabral, **L. O. Tedeschi**, P. I. J. L. da Rosa e Silva, A. C. B. Melo, and A. J. Possamai. 2018. Exogenous enzyme on in vitro gas production and ruminal fermentation of diet containing high level of concentrate. Rev. Bras. Saúde Prod. Anim. 19 (3):287-300. doi: 10.1590/S1519-99402018000300006

22.6. Galvani, D. B., A. V. Pires, I. Susin, V. N. Gouvêa, A. Berndt, A. L. Abdalla, and **L. O. Tedeschi**. 2018. Net protein requirements and metabolizable protein use for growing ram lambs fed diets differing in concentrate level and roughage source. Small Ruminant Res. 165:79-86. doi: 10.1016/j.smallrumres.2018.05.012

22.7. González, L. A., I. Kyriazakis, and **L. O. Tedeschi**. 2018. Review: Precision nutrition of ruminants: approaches, challenges and potential gains. Animal. 12 (S2):S246-S261. doi: 10.1017/S1751731118002288

22.8. Ramana, D. B. V., A. S. M. Selim, and **L. O. Tedeschi**. 2018. The necessity to develop a comprehensive feed library for livestock production in south Asia. Current Science. 115 (7):1270-1275. doi: 10.18520/cs/v115/i7/1260-1275

22.9. **Tedeschi, L. O.**, and M. A. Gorocica-Buenfil. 2018. An assessment of the effectiveness of virginiamycin on liver abscess incidence and growth performance in feedlot cattle: a comprehensive statistical analysis. J. Anim. Sci. 96 (6):2474-2489. doi: 10.1093/jas/sky121

23. 2019

23.1. Almeida, A. K. d., **L. O. Tedeschi**, K. T. de Resende, B. Biagioli, A. Cannas, and I. A. M. d. A. Teixeira. 2019. Prediction of voluntary dry matter intake in stall fed growing goats. Livest. Sci. 219:1-9. doi: 10.1016/j.livsci.2018.11.002

23.2. Berça, A. S., A. D. S. Cardoso, V. Z. Longhini, **L. O. Tedeschi**, R. M. Boddey, A. Berndt, R. A. Reis, and A. C. Ruggieri. 2019. Methane production and nitrogen balance of dairy heifers grazing palisade grass cv. Marandu alone or with forage peanut. J. Anim. Sci. 97 (11):4625-4634. doi: 10.1093/jas/skz310

23.3. Cagle, C. M., L. F. D. Batista, R. C. Anderson, M. A. Fonseca, M. D. Cravey, C. Julien, and **L. O. Tedeschi**. 2019. Evaluation of different inclusion levels of dry live yeast impacts on various rumen parameters and in situ digestibilities of dry matter and neutral detergent fiber in growing and finishing beef cattle. J. Anim. Sci. 97 (12):4987-4998. doi: 10.1093/jas/skz342

23.4. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and M. F. Lunesu. 2019. How can nutrition models increase the production efficiency of sheep and goat operations? Anim. Frontiers. 9 (2):33-44. doi: 10.1093/af/vfz005

23.5. Chay-Canul, A. J., L. A. Sarmiento-Franco, E. del Rosario Salazar-Cuytun, **L. O. Tedeschi**, V. Moo-Huchin, J. R. Canul Solis, and A. T. Piñeiro-Vazquez. 2019. Evaluation of equations to estimate fat content in soft tissues of carcasses and viscera in sheep based on carbon and nitrogen content. Small Ruminant Res. 178:106-110. doi: 10.1016/j.smallrumres.2019.08.005

23.6. Crossland, W. L., C. M. Cagle, J. E. Sawyer, T. R. Callaway, and **L. O. Tedeschi**. 2019. Evaluation of active dried yeast in the diets of feedlot steers. II. Effects on rumen pH and liver health of feedlot steers. J. Anim. Sci. 97:1347-1363. doi: 10.1093/jas/skz008

23.7. Crossland, W. L., J. T. Jobe, F. R. B. Ribeiro, J. E. Sawyer, T. R. Callaway, and **L. O. Tedeschi**. 2019. Evaluation of active dried yeast in the diets of feedlot steers: I. Effects on feeding performance traits, the composition of growth, and carcass characteristics. J. Anim. Sci. 97:1335-1346. doi: 10.1093/jas/skz007

23.8. Gallo, S. B., T. Brochado, L. Brochine, D. Passareli, S. F. Costa, I. C. da S. Bueno, J. C. de C. Baleiro, R. Franzolin Neto, and **L. O. Tedeschi** 2019. Effect of biosurfactant added in two different oil source diets on lamb performance and ruminal and blood parameters. Livest. Sci. 226 (66-72) doi: 10.1016/j.livsci.2019.06.006

23.9. Johnson, J. R., G. E. Carstens, W. K. Krueger, P. A. Lancaster, E. G. Brown, **L. O. Tedeschi**, R. C. Anderson, K. A. Johnson, and A. Brosh. 2019. Associations between residual feed intake and apparent nutrient digestibility, in vitro methane-producing activity, and volatile fatty acid concentrations in growing beef cattle. J. Anim. Sci. 97 (8):3550-3561. doi: 10.1093/jas/skz195

23.10. Menendez III, H. M., M. R. Wuellner, B. L. Turner, R. N. Gates, B. H. Dunn, and **L. O. Tedeschi**. 2019. A spatial landscape scale approach for estimating erosion, water quantity, and quality in response to South Dakota grassland conversion. Natural Resource Modeling.e12243. doi: 10.1111/nrm.12243

23.11. Morales-Martinez, M. A., C. Arce-Recinos, M. M. Mendoza-Taco, C. Luna-Palomera, M. A. Ramirez-Bautista, Á. T. Piñeiro-Vazquez, R. Vicente-Perez, **L. O. Tedeschi**, and A. J. Chay-Canul. 2019. Predicting internal body fat in Pelibuey sheep using ultrasound measurements. Small Ruminant Res. 183:106031. doi: 10.1016/j.smallrumres.2019.106031

23.12. Norris, A. B., **L. O. Tedeschi**, and J. P. Muir. 2019. Assessment of in situ techniques to determine indigestible components in the feed and feces of cattle receiving supplemental condensed tannins. J. Anim. Sci. 97 (12):5016-5026. doi: 10.1093/jas/skz329

23.13. Silva, A. L., T. J. DeVries, **L. O. Tedeschi**, and M. I. Marcondes. 2019. Development of equations, based on milk intake, to predict starter feed intake of preweaned dairy calves. Animal. 13 (1):83-89. doi: 10.1017/S1751731118000666

23.14. **Tedeschi, L. O.** 2019. Relationships of retained energy and retained protein that influence the determination of cattle requirements of energy and protein using the California Net Energy System. Transl. An. Sci. 3 (3):1029-1039. doi: 10.1093/tas/txy120

23.15. **Tedeschi, L. O.**, G. Molle, H. M. Menendez, A. Cannas, and M. A. Fonseca. 2019. The assessment of supplementation requirements of grazing ruminants using nutrition models. Transl. An. Sci. 3 (2):811-828. doi: 10.1093/tas/txy140

23.16. **Tedeschi, L. O.** 2019. ASN-ASAS SYMPOSIUM: FUTURE OF DATA ANALYTICS IN NUTRITION: Mathematical modeling in ruminant nutrition: approaches and paradigms, extant models, and thoughts for upcoming predictive analytics. J. Anim. Sci. 97 (5):1321-1944. doi: 10.1093/jas/skz092

23.17. Trottier, N. L., and **L. O. Tedeschi**. 2019. Dietary nitrogen utilisation and prediction of amino acid requirements in equids. Anim. Prod. Sci. 59 (11):2057-2068. doi: 10.1071/AN19304

23.18. Whitney, T. R., J. E. Sawyer, **L. O. Tedeschi**, and E. A. Colombo. 2019. Substituting hammermilled *Juniperus* spp. for chopped alfalfa hay in steer feedlot diets: Growth performance and blood serum chemistry. Livest. Sci. 227:1-10. doi: 10.1016/j.livsci.2019.06.014

23.19. Zoller, J. L., C. A. Cavinder, D. Sigler, **L. O. Tedeschi**, and J. Harlin. 2019. Development of a mathematical model for predicting digestible energy intake to meet desired body condition parameters in exercising horses. J. Anim. Sci. 97 (5):1945-1955. doi: 10.1093/jas/skz041

24. 2020

24.1. Adams, J. M., A. B. Norris, L. F. D. Batista, M. E. Rivera, and **L. O. Tedeschi**. 2020. Comparison of in situ techniques to evaluate the recovery of indigestible components and the accuracy of digestibility estimates. J. Anim. Sci. doi: 10.1093/jas/skaa296

24.2. Arcos-Álvarez, D., J. Canul-Solís, R. García-Herrera, L. Sarmiento-Franco, Á. Piñeiro-Vazquez, F. Casanova-Lugo, **L. O. Tedeschi**, M. Gonzalez-Ronquillo, and A. Chay-Canul. 2020. Udder measurements and their relationship with milk yield in Pelibuey ewes. Animals. 10 (3):518. doi: 10.3390/ani10030518

24.3. Bautista-Díaz, E., J. A. Mezo-Solis, J. Herrera-Camacho, A. Cruz-Hernández, A. Gomez-Vazquez, **L. O. Tedeschi**, H. A. Lee-Rangel, E. Vargas-Bello-Pérez, and A. J. Chay-Canul. 2020. Prediction of carcass traits of hair sheep lambs using body measurements. Animals. 10 (8):1276. doi: 10.3390/ani10081276

24.4. Cagle, C. M., M. A. Fonseca, T. R. Callaway, C. A. Runyan, M. D. Cravey, and **L. O. Tedeschi**. 2020. Evaluation of the effects of live yeast on rumen parameters and in situ digestibility of dry matter and neutral detergent fiber in beef cattle fed growing and finishing diets. Applied Animal Science. 36 (1):36-47. doi: 10.15232/aas.2019-01888

24.5. Cooke, R. F., C. L. Daigle, P. Moriel, S. B. Smith, **L. O. Tedeschi**, and J. M. B. Vendramini. 2020. Cattle adapted to tropical and subtropical environments: social, nutritional, and carcass quality considerations. J. Anim. Sci. 98 (2):1-20 doi: 10.1093/jas/skaa014

24.6. Dias Batista, L. F., A. B. Norris, and **L. O. Tedeschi**. 2020. Effects of salts of branched-chain volatile fatty acids protected with different combinations of encapsulation materials on gas production dynamics when incubated in vitro with Brachiaria brizantha 'Marandu'. Applied Animal Science. 36 (5):677-687. doi: 10.15232/aas.2020-02017

24.7. Gallo, S. B., D. B. Moretti, M. C. Oliveira, F. F. dos Santos, L. Brochine, G. Micai, M. M. da Silva, and **L. O. Tedeschi**. 2020. The colostrum composition of sheep fed with high-energy diets supplemented with chromium. Small Ruminant Res. 191:106177. doi: 10.1016/j.smallrumres.2020.106177

24.8. Goulart, R. S., R. A. M. Vieira, J. L. P. Daniel, R. C. Amaral, V. P. Santos, S. G. Toledo Filho, E. H. Cabezas-Garcia, **L. O. Tedeschi**, and L. G. Nussio. 2020. Effects of source and concentration of neutral detergent fiber from roughage in beef cattle diets on feed intake, ingestive behavior, and ruminal kinetics. J. Anim. Sci. 98 (5) doi: 10.1093/jas/skaa107

24.9. Goulart, R. S., R. A. M. Vieira, J. L. P. Daniel, R. C. Amaral, V. P. Santos, S. G. Toledo Filho, E. H. Cabezas-Garcia, **L. O. Tedeschi**, and L. G. Nussio. 2020. Effects of source and concentration of neutral detergent fiber from roughage in beef cattle diets: Comparison of methods to measure the effectiveness of fiber. J. Anim. Sci. 98 (5) doi: 10.1093/jas/skaa108

24.10. Jennings, J. S., C. L. Lockard, **L. O. Tedeschi**, and T. E. Lawrence. 2020. Effects of corn stalk inclusion rate on rumination and ruminal pH in finishing beef steers. Applied Animal Science. 36 (3):377-388. doi: 10.15232/aas.2019-01947

24.11. Marques, J. G. O., R. d. O. Silva, L. G. Barioni, J. A. J. Hall, **L. O. Tedeschi**, and D. Moran. 2020. An improved algorithm for solving profit-maximizing cattle diet problems. Animal. 14 (S2):s257-s266. doi: 10.1017/S1751731120001433

24.12. Menendez III, H. M., and **L. O. Tedeschi**. 2020. The characterization of the cow-calf, stocker and feedlot cattle industry water footprint to assess the impact of livestock water use sustainability. J. Agric. Sci.:1-15. doi: 10.1017/S0021859620000672

24.13. Menendez III, H. M., A. S. Atzori, and **L. O. Tedeschi**. 2020. Development of a daily livestock water footprint assessment using a dynamic, mechanistic approach:

Model conceptualization and preliminary evaluation. bioRxiv.2020.2004.2014.028324. doi: 10.1101/2020.04.14.028324

24.14. Morales-Martinez, M. A., C. Arce-Recinos, M. M. Mendoza-Taco, C. Luna-Palomera, M. A. Ramirez-Bautista, Á. T. Piñeiro-Vazquez, R. Vicente-Perez, **L. O. Tedeschi**, and A. J. Chay-Canul. 2020. Developing equations for predicting internal body fat in Pelibuey sheep using ultrasound measurements. Small Ruminant Res. 183:106031. doi: 10.1016/j.smallrumres.2019.106031

24.15. Norris, A. B., **L. O. Tedeschi**, J. L. Foster, J. P. Muir, W. E. Pinchak, and M. A. Fonseca. 2020. AFST: Influence of quebracho tannin extract fed at differing rates within a high-roughage diet on the apparent digestibility of dry matter and fiber, nitrogen balance, and fecal gas flux. Anim. Feed Sci. Technol. 260:114365. doi: 10.1016/j.anifeedsci.2019.114365

24.16. Norris, A. B., W. L. Crossland, **L. O. Tedeschi**, J. L. Foster, J. P. Muir, W. E. Pinchak, and M. A. Fonseca. 2020. Inclusion of Quebracho tannin extract in a high-roughage cattle diet alters digestibility, nitrogen balance, and energy partitioning. J. Anim. Sci. 98(3):1-12. doi: 10.1093/jas/skaa047

24.17. Norris, A. B., **L. O. Tedeschi**, J. P. Muir, J. L. Foster, K. D. Casey, and W. E. Pinchak. 2020. The effect of quebracho (*Schinopsis balansae*) condensed tannin extract fed to steers on seasonal fecal gas flux. J. Environ. Qual. 49 (5):1225-1235. doi: 10.1002/jeq2.20110

24.18. Oliveira, J. G. d., D. F. D. Sant'Anna, M. C. Lourenço, D. S. Tavares, M. T. Rodrigues, **L. O. Tedeschi**, and R. A. M. Vieira. 2020. The geometry of the lactation curve based on Wood's equation: a two-step prediction. Rev. Bras. Zootec. 49:e20200023. doi: 10.37496/rbz4920200023

24.19. Parsons, I. L., J. R. Johnson, W. C. Kayser, **L. O. Tedeschi**, and G. E. Carstens. 2020. Characterization of feeding behavior traits in steers with divergent residual feed intake consuming a high-concentrate diet. J. Anim. Sci. 98 (7) doi: 10.1093/jas/skaa189

24.20. Rohem Júnior, N. M., M. C. d. Silva, M. L. C. Abreu, J. G. d. Oliveira, L. S. Glória, **L. O. Tedeschi**, and R. A. M. Vieira. 2020. The transit of external markers throughout the ruminant digestive tract: 1. The fitting quality of models to marker profiles in feces using an information-theoretic approach. Anim. Feed Sci. Technol.:114407. doi: 10.1016/j.anifeedsci.2020.114407

24.21. Salazar-Cuytun, E. R., L. A. Sarmiento-Franco, A. J. Aguilar-Caballero, M. A. Fonseca, and **L. O. Tedeschi**. 2020. Body mass index and body chemical components in Pelibuey ewes. Ecosistemas y recursos agropecuarios. 7 (2):1-11. doi: 10.19136/era.a7n2.2515

24.22. Smith, W. B., J. P. Banta, J. L. Foster, L. A. Redmon, T. J. Machado, **L. O. Tedeschi**, and F. M. Rouquette. 2020. Evaluation of growth performance and carcass characteristics of beef stocker cattle grazing Tifton 85 bermudagrass supplemented with dried distillers grains with solubles then finished in the feedlot. Applied Animal Science. 36 (3):308-319. doi: 10.15232/aas.2019-01907

24.23. Smith, W. B., M. D. Miller, W. L. Crossland, T. R. Callaway, **L. O. Tedeschi**, and F. M. Rouquette. 2020. In vitro gas production including methane from bermudagrasses supplemented with dried distillers grains with solubles. Applied Animal Science. 36 (2):172-182. doi: 10.15232/aas.2019-01916

24.24. Vargas-Villamil, L. M., **L. O. Tedeschi**, S. Medina-Peralta, F. Izquierdo-Reyes, J. Navarro-Alberto, and R. González-Garduño. 2020. A multi-inverse approach for a

holistic understanding of applied animal science systems. Animal. 14 (S2):s238-s249. doi: 10.1017/S1751731120000877

24.25. Vieira, R. A. M., N. M. Rohem Júnior, M. L. C. Abreu, M. C. Silva, J. G. Oliveira, **L. O. Tedeschi**, and L. S. Glória. 2020. The transit of external markers throughout the ruminant digestive tract: 2. The estimation of fiber digestibility, ruminoreticular fill, and related biases. Anim. Feed Sci. Technol. 261:114420. doi: 10.1016/j.anifeedsci.2020.114420

24.26. Woli, P., F. M. Rouquette, Jr., C. R. Long, **L. O. Tedeschi**, and G. Scaglia. 2020. Modification of the summative equation to estimate daily total digestible nutrients for bermudagrass pasture. J. Anim. Sci. 98 (11):1-9. doi: 10.1093/jas/skaa354

25. 2021

25.1. Alhadas, H. M., S. C. Valadares Filho, L**. O. Tedeschi**, R. S. R. Vilela, G. A. P. Souza, B. C. Lage, B. C. Silva, L. N. Rennó, and M. F. Paulino. 2021. Impact of different levels of low-fat dried distillers grains on performance of young Nellore bulls during the finishing phase. Anim. Sci. J. 92 (1):e13623. doi: 10.1111/asj.13623

25.2. Alhadas, H. M., S. C. Valadares Filho, F. F. Silva, F. A. S. Silva, P. Pucetti, M. V. C. Pacheco, B. C. Silva, and **L. O. Tedeschi**. 2021. Effects of including physically effective fiber from sugarcane in whole corn grain diets on the ingestive, digestive, and ruminal parameters of growing beef bulls. Livest. Sci. 248:104508. doi: 10.1016/j.livsci.2021.104508

25.3. Alhadas, H. M., S. C. V. Filho, L. O. Tedeschi, R. S. R. Vilela, and G. A. P. Souza. 2021. In situ evaluation of dried distillers grains (DDG) and of diets containing different levels of DDG inclusion replacing soybean meal, urea and corn, and development of alternative methods to estimate in vivo digestibility of diets. Livest. Sci. 253:104706. doi: 10.1016/j.livsci.2021.104706

25.4. Batalha, C. D. A., **L. O. Tedeschi**, F. L. d. Araújo, R. H. Branco, J. N. d. S. G. Cyrillo, and S. Figueiredo Martins Bonilha. 2021. Animals selected for postweaning weight gain rate have similar maintenance energy requirements regardless of their residual feed intake classification. J. Anim. Sci. doi: 10.1093/jas/skab067

25.5. Berça, A. S., A. da S. Cardoso, V. Z. Longhini, **L. O. Tedeschi**, R. M. Boddey, R. A. Reis, and A. C. Ruggieri. 2021. Protein and carbohydrate fractions in warm-season pastures: Effects of nitrogen management strategies. Agronomy. 11 (5):847. doi: 10.3390/agronomy11050847

25.6. Cusack, P. M. V., D. Dell'Osa, G. Wilkes, D. Grandini, and **L. O. Tedeschi**. 2021. Ruminal pH and its relationship with dry matter intake, growth rate, and feed conversion ratio in commercial Australian feedlot cattle fed for 148 days. Australian Veterinary Journal. 99 (8):319-325. doi: 10.1111/avj.13069

25.7. Dias Batista, L. F., M. E. Rivera, A. B. Norris, J. P. Muir, M. A. Fonseca, and **L. O. Tedeschi**. 2021. The influence of extended supplementation of quebracho extract to beef steers consuming a hay diet on digestion, ruminal, and blood parameters. J. Anim. Sci. 99 (5):1-12. doi: 10.1093/jas/skab074

25.8. Dias Batista, L. F., A. B. Norris, J. M. Adams, T. B. Hairgrove, and **L. O. Tedeschi**. 2021. Technical note: The comparison of pH and redox potential in different locations in the reticulo-rumen of growing beef steers supplemented with different levels of quebracho extract. J. Anim. Sci. 99 (10):1-7. doi: 10.1093/jas/skab260

25.9. Dillon, J. A., K. R. Stackhouse-Lawson, G. J. Thoma, S. A. Gunter, C. A. Rotz, E. Kebreab, D. G. Riley, **L. O. Tedeschi**, J. Villalba, F. Mitloehner, A. N. Hristov, S. L. Archibeque, J. P. Ritten, and N. D. Mueller. 2021. Current state of enteric methane

and the carbon footprint of beef and dairy cattle in the United States. Anim. Frontiers. 11 (4):57-68. doi: 10.1093/af/vfab043

25.10. dos Reis, B. R., **L. O. Tedeschi**, A. Saran Netto, S. L. Silva, and P. A. Lancaster. 2021. Grazing beef cows identified as efficient using a nutrition model partition more energy to lactation. Anim. Prod. Sci. 62 (1):40-54. doi: 10.1071/AN20558

25.11. Free, N., H. M. Menendez III, and **L. O. Tedeschi** 2021. A paradigm shift for academia teaching in the era of virtual technology: The case study of developing an edugame in animal science. Educ Inf Technol. doi: 10.1007/s10639-020-10415-w

25.12. Gallo, S. B., and **L. O. Tedeschi.** 2021. Developing a continuous adjustment factor for dry matter intake of gestating and lactating ewes. Sci. Agric. 78 (2):e20190082. doi: 10.1590/1678-992X-2019-0082

25.13. Jennings, J. S., R. G. Amachawadi, S. K. Narayanan, T. G. Nagaraja, **L. O. Tedeschi**, W. N. Smith, and T. E. Lawrence. 2021. Effects of corn stalk inclusion and tylosin on performance, rumination, ruminal papillae morphology, and gut pathogens associated with liver abscesses from finishing beef steers. Livest. Sci. 251:104623. doi: 10.1016/j.livsci.2021.104623

25.14. Lancaster, P. A., **L. O. Tedeschi**, Z. Buessing, and M. E. Davis. 2021. Assessment of milk yield and nursing calf feed intake equations in predicting calf feed intake and weaning weight among breeds. J. Anim. Sci. 99 (2) doi: 10.1093/jas/skaa406

25.15. Leite, R. G., A. d. S. Cardoso, N. V. B. Fonseca, M. L. C. Silva, **L. O. Tedeschi**, L. M. Delevatti, A. C. Ruggieri, and R. A. Reis. 2021. Effects of nitrogen fertilization on protein and carbohydrate fractions of Marandu palisadegrass. Sci. Rep. 11 (1):14786. doi: 10.1038/s41598-021-94098-4

25.16. Price, T. R., S. A. Baskaran, K. L. Moncada, Y. Minamoto, C. Klemashevich, A. Jayuraman, J. S. Sucholdoski, **L. O. Tedeschi**, J. M. Steiner, S. D. Pillai, and R. L. Walzem. 2021. Whole and isolated protein fractions differentially affect gastrointestinal integrity markers in C57Bl/6 mice fed diets with a moderate-fat content. Nutrients. 13 (4). doi: 10.3390/nu13041251

25.17. Selim, A. S. M., M. M. Mollah, A. Haque, M. M. Rahman, M. Jahan, R. Islam, A. B. M. R. Bostami, S. Ahmed, and **L. O. Tedeschi**. 2021. Effect of probiotic treated rice straw on nutrient digestibility, milk yield and composition in dairy cows. European Journal of Applied Sciences. 13 (1):1-8. doi: 10.5829/idosi.ejas.2021.01.08

25.18. Seo, S., K. Kang, S. Jeon, M. Lee, S. Jeong, and **L. Tedeschi**. 2021. Development of a model to predict dietary metabolizable energy from digestible energy in beef cattle. J. Anim. Sci. 99 (7). doi: 10.1093/jas/skab182

25.19. Smith, W. B., J. P. Banta, J. L. Foster, L. A. Redmon, T. J. Machado, **L. O. Tedeschi**, and F. M. Rouquette, Jr. 2021. Effects of supplementation of dried distillers grains with solubles to beef steers grazing Coastal bermudagrass on performance on pasture and in feedlot, and carcass characteristics. Applied Animal Science. 37 (2):155-165. doi: 10.15232/aas.2020-02120

25.20. **Tedeschi, L. O.**, D. P. Bureau, P. R. Ferket, and N. L. Trottier. 2021. ASAS-NANP SYMPOSIUM: Mathematical modeling in animal nutrition: training the future generation in data and predictive analytics for sustainable development. A Summary. J. Anim. Sci. 99 (2) doi: 10.1093/jas/skab023

25.21. **Tedeschi, L. O.**, P. L. Greenwood, and I. Halachmi. 2021. Advancements in sensor technology and decision support intelligent tools to assist smart livestock farming. J. Anim. Sci. 99 (2) doi: 10.1093/jas/skab038

25.22. **Tedeschi , L. O.**, J. P. Muir, H. D. Naumann, A. B. Norris, C. A. Ramírez-Restrepo, and S. U. Mertens-Talcott. 2021. Nutritional aspects of ecologically relevant phytochemicals in ruminant production. Front. Vet. Sci. 8 (628445) doi: 10.3389/fvets.2021.628445

25.23. Woli, P., F. M. Rouquette, C. R. Long, and **L. O. Tedeschi**. 2021. Estimating the daily nutritive value of bermudagrass for grazing livestock. Applied Animal Science. 37 (1):1-10. doi: 10.15232/aas.2020-02087

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Note: * denotes invited speaker.

1. Prior to 2000

1.1. Boin, C. and **L. O. Tedeschi**. 1993. Sugar cane for feeding beef cattle. Pages 107-127 in Simpósio sobre Nutrição de Bovinos, 5. Piracicaba, SP.

1.2. Boin, C. and **L. O. Tedeschi**. 1996. Intensive production systems of bovine meat production. 2. Growing and finishing. Pages 205-227 in Simpósio sobre Pecuária de Corte, 4. Piracicaba:FEALQ.

1.3. Boin, C., **L. O. Tedeschi**, and D. P. D. Lanna. 1997. Meeting the nutritional requirements of rotational grazing bovines. In Simpósio sobre Manejo de Pastagem, 14. Piracicaba, SP.

1.4. Lanna, D. P. D., D. G. Fox, and **L. O. Tedeschi**. 1998. Nutritional requirements of beef cattle: The NRC system. Pages 138-167 in Simpósio sobre Produção Intensiva de Gado de Corte. Campinas, SP.

1.5. Nardon, R. F., **L. O. Tedeschi**, C. Boin, A. A. M. Sampaio, A. G. Razook, L. A. Figueiredo, and M. L. P. Lima. 1998. Growth performance and carcass composition of Bos indicus and adapted Bos taurus selected based on weight gain after weaning and on adjusted weight at 378 days of age. Pages 137-140 in Proceedings of the 6th World Congress on Genetics Applied to Livestock Production. Armidale.

1.6. Barioni, L. G., **L. O. Tedeschi**, and D. P. D. Lanna. 1999. A combination of linear and nonlinear optimisation algorithms to maximise net return in feedlots. Pages 807-812 in Proceedings of the 2nd International Congress of Modelling and Simulation, v. 3. L. Oxley, F. Scrimgeour and A. Jakeman, eds. Hamilton, New Zealand.

2. 2000

2.1. **Tedeschi, L. O.**, D. G. Fox, and J. B. Russell. 2000. Accounting for ruminal deficiencies of nitrogen and branched-chain amino acids in the structure of the Cornell net carbohydrate and protein system. Pages 224-238 in Proc. Cornell Nutr. Conf. Feed Manuf., Rochester, NY.

2.2. Van Soest, P. J., M. E. Van Amburgh, and **L. O. Tedeschi**. 2000. Rumen balance and rates of fiber digestion. Pages 150-166 in Proc. Cornell Nutr. Conf. Feed Manuf., Rochester, NY.

3. 2001

3.1. Fox, D. G., **L. O. Tedeschi**, and P. J. Guiroy. 2001. A decision support system for individual cattle management. Pages 64-76 in Proc. Cornell Nutr. Conf. Feed Manuf., Rochester, NY.

3.2. Fox, D. G., L. O. Tedeschi, and P. J. Guiroy. 2001. Determining feed intake and feed efficiency of individual cattle fed in groups. Pages 80-98 in Beef Improvement Federation, 33, San Antonio, TX.

4. 2002

4.1. Fox, D. G., **L. O. Tedeschi**, and M. J. Baker. 2002. Determining post-weaning efficiency of beef cattle. Pages 44-66 in Beef Improvement Federation, 34, Omaha, NE.

4.2. Fox, D. G. and **L. O. Tedeschi**. 2002. Application of physically effective fiber in diets for feedlot cattle. Pages 67-81 in Plains Nutrition Conference, San Antonio, TX. April 25-26, 2002.

4.3. Fox, D. G., T. P. Tylutki, G. L. Albrecht, P. E. Cerosaletti, and **L. O. Tedeschi**. 2002. Environmental protection and the Cornell university nutrient management planning system: Future perspectives. Pages 79-98 in Proc. Cornell Nutr. Conf. Feed Manuf., Syracuse, NY.

4.4. Russell, J. B., T. V. Muscato, and **L. O. Tedeschi**. 2002. The effect of ruminal fluid preparations on the growth and health of new-born, milk-fed dairy calves. In: Proc. 4th Korea-Japan Symposium on Rumen Metabolism and Physiology.

5. 2003

5.1. Aquino, D.L., **L. O. Tedeschi***, C. Lanzas, S. S. Lee, and J. B. Russell. 2003. Evaluation of CNCPS predictions of milk production of dairy cows fed alfalfa silage. Pages 137-150 in Proc. Cornell Nutr. Conf. Feed Manuf., Syracuse, NY.

5.2. Cannas, A., **L. O. Tedeschi**, D. G. Fox, A. N. Pell, and P. J. Van Soest. 2003. Evaluation of the CNCPS sheep model for predicting nutrient requirements and feed biological values on farms. World Conference on Animal Production, 9, v. CD-ROM. Porto Alegre, Brazil. World Association for Animal Production (WAAP).

5.3. Fox, D. G., M. J. Baker, **L. O. Tedeschi**, and H. I. Anderssen. 2003. Accounting for differences in energy requirements in evaluating beef cow efficiency. World Conference on Animal Production, 9, v. CD-ROM. Porto Alegre, Brazil. World Association for Animal Production (WAAP).

5.4. Rueda, B., R. W. Blake, C. F. Nicholson, D. G. Fox, **L. O. Tedeschi**, A. N. Pell, J. F. Valentim, and J. C. Carneiro. 2003. Production and economic potentials of cattle in pasture-based systems of the western Amazon of Brazil. World Conference on Animal Production, 9, v. CD-ROM. Porto Alegre, Brazil. World Association for Animal Production (WAAP).

5.5. **Tedeschi, L. O.**, D. G. Fox, M. J. Baker, and D. P. Kirschten. 2003. A growth model to estimate cattle intake based on animal performance to select for feed efficiency. World Conference on Animal Production, 9, v. CD-ROM. Porto Alegre, Brazil. World Association for Animal Production (WAAP).

6. 2004

6.1. Boin, C., **L. O. Tedeschi**, and M. Q. Manella. 2004. Current concepts of protein nutrition of beef cattle in feedlot conditions. Pages 299-354 in Simpósio sobre Bovinocultura de Corte, 5, Piracicaba, SP.

6.2. Fox, D. G., **L. O. Tedeschi**, M. J. Baker, and D. P.Kirschten. 2004. Identifying differences in feed efficiency in beef cattle. Proceedings of the Sandhills Cattle Association Convention, Valentine, NE. (May 27, 2004)

6.3. **Tedeschi*, L. O.**, D. G. Fox, and M. J. Baker. 2004. Unveiling the production efficiency of beef cow: A systematic approach using models. Page 12 in Winter Beef Management Meeting, Corning, NY.

6.4. **Tedeschi*, L. O.** 2004. Assessment of the Adequacy of Mathematical Models. Page 49 in Workshop on Model Evaluation. Sassari, Italy.

6.5. **Tedeschi*, L. O.**, D. G. Fox, R. D. Sainz, L. G. Barioni, S. R. Medeiros, and C. Boin. 2004. Using Mathematical Models in Ruminant Nutrition. Pages 228-238 in Reunião Anual da Sociedade Brasileira de Zootecnia, 41, Campo Grande, MS, Brasil. Sociedade Brasileira de Zootecnia.

7. 2006 (Assistant Professor at TAMU)

7.1. Carstens, G. E. and **L. O. Tedeschi**. 2006. Defining feed efficiency in beef cattle. Pages 12-21 in Beef Improvement Federation, 38, Choctaw, Mississippi.

7.2. Fox, D. G., T. P. Tylutki, **L. O. Tedeschi**, and P. E. Cerosaletti. 2006. Using a nutrition model to implement the NRCS feed management standard to reduce the environmental impact of a concentrated cattle feeding operation. Page 15 p. in Visions for Animal Agriculture and the Environment, Kansas City, MO. Department of Animal Science at Iowa State University.

7.3. **Tedeschi*, L. O.**, M. L. Chizzotti, D. G. Fox, and G. E. Carstens. 2006. Using mathematical nutrition models to improve beef cattle efficiency. Pages 461-484 in International Symposium of Beef Production, V, Viçosa, MG, Brazil. Suprema Gráfica e Editora Ltda.

8. 2007

8.1. Bourg, B., **L. O. Tedeschi**, G. E. Carstens, and P. A. Lancaster. 2007. Using meta-analysis to study residual feed intake and CVDS model predictions of feed intake and efficiency in growing and finishing cattle. Pages 1-2 in International Symposium on Energy and Protein Metabolism and Nutrition, 2nd, Vichy, France.

8.2. Cannas, A., **L. O. Tedeschi**, and D. G. Fox. 2007. Prediction of metabolizable energy intake and energy balance of goats with the Small Ruminant Nutrition System. Pages 1-2 in International Symposium on Energy and Protein Metabolism and Nutrition, 2nd, Vichy, France.

8.3. Chizzotti, M. L., **L. O. Tedeschi**, S. C. Valadares Filho, P. V. R. Paulino, and F. H. M. Chizzotti. 2007. Energy and protein requirements of purebred and crossbred Nellore bulls, steers, and heifers: A meta-analysis evaluation. Pages 1-2 in International Symposium on Energy and Protein Metabolism and Nutrition, 2nd, Vichy, France.

8.4. Lancaster, P. A., G. E. Carstens, J. J. Michal, K. M. Brenman, K. A. Johnson, L J. Slay, **L. O. Tedeschi**, M. E. Davis. 2007. Relationship between hepatic mitochondrial function and residual feed intake in growing beef calves. Pages 1-2 in International Symposium on Energy and Protein Metabolism and Nutrition, 2nd, Vichy, France.

8.5. Muir, J. P., E. Valencia, R. Wolfe, B. D. Lambert, **L. O. Tedeschi**, and T. T. Terrill. 2007. The role of tropical legume condensed tannins in the ruminant environment. Pages 60-64 in Proceedings of the 43rd Annual Meeting of the Caribbean Food Crops Society (Marketing Opportunities for Agriculture and Forestry Products in the Greater Caribbean-A Challenge for the 21st Century), 43. W. I. Lugo and W. Colón, eds. San José, Costa Rica.

8.6. **Tedeschi*, L. O.**, D. G. Fox, and J. B. Russell. 2007. Development of mathematical models to estimate animal performance and feed biological values. Pages 223-252 in International Symposium of Advances in Research Techniques for Ruminant Nutrition, 1, Pirassununga, SP, Brazil. Studium 5D Marketing e Comunicação.

9. 2008

9.1. Carstens, G. E., P. A. Lancaster, and **L. O. Tedeschi**. 2008. Bringing feed efficiency technologies to the beef industry. Pages 156-167 in Proceedings of the Florida Ruminant Nutrition Symposium, 19. Gainesville, FL.

9.2. **Tedeschi*, L. O.**, A. Cannas, and D. G. Fox. 2008. A nutrition mathematical model to account for dietary supply and requirements of energy and protein for domesticated small ruminants: The development and evaluation of the Small Ruminant Nutrition System. Pages 178-190 in Brazilian Society of Animal Science, Lavras, MG. SBZ.

9.3. **Tedeschi*, L. O.**, and D. G. Fox. 2008. Nutrition models to improve beef cattle production efficiency. Pages 18-33 in Yanbian International Symposium on the Developmental Strategies of Animal Science and Animal Production in China, Yanji, China.

9.4. **Tedeschi*, L. O.** and D. G. Fox. 2008. Nutrition models to improve carcass quality and profitability of beef cattle. Page 17 p. in International Symposium on Beef Cattle Production, 1st, Zacatecas, Mexico. La Universidad Autónoma de Zacatecas.

9.5. **Tedeschi*, L. O.**, D. G. Fox, and J. B. Russell. 2008. Development of mathematical models to estimate animal performance and feed biological values. Page 21 p. in International Symposium on Beef Cattle Production, 1st, Zacatecas, Mexico. La Universidad Autónoma de Zacatecas.

9.6. **Tedeschi*, L. O.**, A. Cannas, and D. G. Fox. 2008. Development and evaluation of a nutrition model to account for dietary supply and requirements of nutrients for sheep and goats. In International Conference on Goats, Queretaro, MX. International Goat Association.

9.7. **Tedeschi*, L. O.**, P. Schofield, and A. N. Pell. 2008. Determining feed quality for ruminants using in vitro gas production technique. 1. Building an anaerobic fermentation chamber. Page 16 p. in The 4th Workshop on Modeling in Ruminant Nutrition: Application of the Gas Production Technique, Juiz de Fora, MG, Brazil. EMBRAPA.

9.8. **Tedeschi*, L. O.**, P. Schofield, and A. N. Pell. 2008. Determining feed quality for ruminants using in vitro gas production technique. 2. Evaluating different models to assess gas production measurements. Page 15 p. in The 4th Workshop on Modeling in Ruminant Nutrition: Application of the Gas Production Technique, Juiz de Fora, MG, Brazil. EMBRAPA.

10. 2009

10.1. **Tedeschi*, L. O.**, D. G. Fox, and J. B. Russell. 2009. Development of mathematical models to estimate animal performance and feed biological values. Page 21 p. in International Symposium on Beef Cattle Production, 2nd, Zacatecas, Mexico. La Universidad Autónoma de Zacatecas.

11. 2010

11.1. Marcondes, M. I., **L. O. Tedeschi**, S. C. Valadares Filho, M. P. Gionbelli, and M. L. Chizzotti. 2010. Prediction of partial efficiency of use of metabolizable energy to net energy for gain and maintenance. Pages 543-544 in International Symposium on Energy and Protein Metabolism and Nutrition, 3rd, Parma, Italy. Wageningen Academic Publishers.

11.2. Oltjen, J. W., A. Cannas, A. S. Atzori, **L. O. Tedeschi**, R. D. Sainz, and D. G. Fox. 2010. Integration of the Small Ruminant Nutrition System and of the UC Davis sheep growth model for improved gain predictions. Pages 553-554 in International Symposium on Energy and Protein Metabolism and Nutrition, 3rd, Parma, Italy. Wageningen Academic Publishers.

11.3. Oltjen, J. W., R. D. Sainz, A. Cannas, and **L. O. Tedeschi**. 2010. Note on the calculation of efficiency of feed use for maintenance and gain in feeding systems.

Pages 555-556 in International Symposium on Energy and Protein Metabolism and Nutrition, 3rd, Parma, Italy. Wageningen Academic Publishers.

11.4. **Tedeschi*, L. O.**, and D. G. Fox. 2010. The application of nutrition models to determine feed efficiency in beef cattle. Pages 23-46 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

11.5. **Tedeschi*, L. O.**, A. Cannas, and D. G. Fox. 2010. Using System Dynamics modelling approach to develop management tools for animal production with emphasis on small ruminants. In International Conference on Goats, Recife, Brazil. International Goat Association.

11.6. **Tedeschi*, L. O.**, D. G. Fox, G. E. Carstens, and C. L. Ferrell. 2010. The partial efficiency of use of metabolizable energy to net energy for growth in ruminants. Pages 519-529 in International Symposium on Energy and Protein Metabolism and Nutrition, 3rd, Parma, Italy. Wageningen Academic Publishers.

11.7. **Tedeschi*, L. O.**, D. G. Fox, and D. K. Roseler. 2010. An interactive, mechanistic nutrition model to determine energy efficiency of lactating dairy cows. Pages 252-262 in Modelling Nutrient Digestion and Utilization in Farm Animals, 7th, Paris, France. University of Wageningen Press.

12. 2011 (Associate Professor at TAMU)

12.1. Nicholson, C. F., **L. O. Tedeschi***, and A. C. F. Lellis Vieira. 2011. The Application of System Dynamics Modeling to Enhance Profitability and Sustainability in Latin American Livestock Systems. Pages 132-162 in Genómica Y Modelación en los Nuevos Escenarios de la Ganaderia Bovina Tropical, 2o. Simposio Internacional, Palmira, Colombia. Universidad Nacional de Colombia.

12.2. Tedeschi, L. O., and D. G. Fox. 2011. A model to improve carcass quality and profitability of beef cattle: The CVDS technology. Pages 1-36 in VII Simpósio de Pecuária de Corte (SIMPEC) e II Simpósio Internacional de Pecuária de Corte. M. L. Chizzotti, M. M. Ladeira, O. R. Machado Neto, M. C. Silva, L. S. Lopes, J. R. R. Carvalho, D. M. Oliveira and M. C. L. Alves, eds. Lavras, MG. Suprema Gráfica e Editora Ltda.

13. 2012

13.1. **Tedeschi*, L. O.**, F. N. Owens, D. P. Poppi, G. E. Carstens, and C. Boin. 2012. Grain processing interactions with cattle breed (Bos indicus and Bos taurus). Pages 1-19 in Proceedings of the 7th International Congress on Beef Cattle, São Pedro, SP. Fundação de Estudos Agrários "Luiz de Queiroz" (FEALQ).

14. 2013

14.1. **Tedeschi*, L. O.**, D. G. Fox, M. A. Fonseca, and L. F. L. Cavalcanti. 2013. Models of protein and amino acid requirements for cattle. Pages 1-45 (CD format) in Proceedings of the 50th Annual Meeting of the Brazilian Society of Animal Science, Campinas, São Paulo, Brazil. Sociedade Brasileira de Zootecnia (SBZ).

15. 2014

15.1. Fonseca, M. A., W. L. Crossland, **L. O. Tedeschi**, T. R. Callaway, and G. E. Carstens. 2014. Alternatives to reduce methane production from beef cattle: A case study for dried distillers' grain (DDG). Pages J5-J15 in Beef Cattle Short Course, College Station, TX. Texas A&M University.

16. 2015

16.1. **Tedeschi*, L. O.**, J. P. Muir, D. G. Riley, and D. G. Fox. 2015. Future implications for animal production: A perspective on sustainable livestock intensification. Pages 1-?? (CD format) in Proceedings of the 52th Annual Meeting of the Brazilian Society of

Animal Science, Belo Horizonte, Minas Gerais, Brazil. Sociedade Brasileira de Zootecnia (SBZ).

17. 2016 (Professor at TAMU)

17.1. de Oliveira, O. F., M. V. F. dos Santos, J. P. Muir, M. V. da Cunha, N. Cherry, **L. O. Tedeschi**, W. Crossland, and J. Dubeux, José Carlos B. 2016. Methane suppression and larval migration inhibition by Bauhinia cheilantha fed to sheep grazing at four forage allowances. Pages 372-374 in Proceedings of the 10th International Rangeland Congress. Saskatoon, Saskatchewan, Canada. Available at: http://2016canada.rangelandcongress.org/. Accessed on: August 14, 2016.

18. 2017

18.1. **Tedeschi*, L. O.** 2017. Advancements in the determination of optimum slaughter point of feedlot cattle. Pages 1- 23 in Proceedings of the 8th International Symposium on Beef Cattle -- Feedlot Cattle Production. Piracicaba, SP. Fundação de Estudos Agrários "Luiz de Queiroz" (FEALQ).

19. 2018

19.1. Trottier, N. L., and **Tedeschi, L. O.** 2018. Modeling the amino acid and nitrogen requirements for gestation and lactation in the mare: gaps and future research needs. Proceedings of the 79th Minnesota Nutrition Conference. Mankato, MN. University of Minnesota.

20. 2021

20.1. **Tedeschi, L. O.**, and L. F. Dias Batista. 2021. Precision determination of energy and protein requirements of grazing and feedlot animals. Pages 177-204 in Feeding the Future: Precision Nutrition for Tomorrow's Animal. D. Kumar, M.-P. Létourneau-Montminy, L. McKnight, I. Parenteau, R. Petri, S. Robinson, G. Widyaratne and S. Hopkins, eds. Virtual. Animal Nutrition Association of Canada

Scientific Abstract

1. 1989

1.1. Nardon, R. F., A. G. Razook, A. A. M. Sampaio, L. O. Tedeschi, L. A. Figueiredo, C. Boin, and M. L. P. Lima. 1989. Effects of breed and selection for post-weaning weight on yield percentages of trimmed carcass cuts and meat quality of bulls. Page 4 in Anais da XXXV Reunião da SBZ. Botucatu, SP, Brazil. SBZ.

2. 1996

2.1. Alleoni, G. F., P. R. Leme, C. Boin, R. F. Nardon, J. A. A. Demarchi, P. F. Vieira, and **L. O. Tedeschi**. 1996. Avaliação da composição química e física dos cortes da costela para estimar a composição corporal de novilhos Nelore. In: Reunião Anual da Sociedade Brasileira de Zootecnia, 33., Fortaleza, SBZ, p.444-446.

3. 1997 (Cornell University)

3.1. Beltrame Filho, J. A., **L. O. Tedeschi**, D. A. Capelari, F. G. Ribeiro, A. A. F. B. José, and D. P. D. Lanna. 1997. Comparação entre dietas de custo mínimo e lucro máximo para ruminantes em diferentes cenários de produção. In: Simpósio de Iniciação Científica da Universidade de São Paulo, 5., Piracicaba, p. 19.

3.2. Lanna, D. P. D., P. R. Leme, C. Boin, F. G. F. Castro, A. C. Vieira, V. M. Quecini, **L. O. Tedeschi**, M. Hussne, and L. L. Coutinho. 1997. Carcass characteristics of different genetic groups of bovines in compensatory growth. Page 3 in Anais da XXXIV Reunião da SBZ. Juiz de Fora, MG, Brazil. SBZ.

3.3. Lanna, D. P. D., P. R. Leme, C. Boin, F. G. F. Castro, A. C. Vieira, V. M. Quecini, **L. O. Tedeschi**, M. Hussne, and L. L. Coutinho. 1997. Compensatory gain of different genetic groups in the feedlot: chemical and physical body composition. Page 3 in Anais da XXXIV Reunião da SBZ. Juiz de Fora, MG, Brazil. SBZ.

3.4. Lanna, D. P. D., P. R. Leme, M. Hussne, C. Boin, F. G. F. Castro, A. C. Vieira, V. M. Quecini, **L. O. Tedeschi**, and L. L. Coutinho. 1997. Compensatory gain of different genetic groups in the feedlot: Performance and validation of modeling estimates. Page 4 in Anais da XXXIV Reunião da SBZ. Juiz de Fora, MG, Brazil. SBZ.

3.5. Nardon, R. F., **L. O. Tedeschi**, C. Boin, A. G. Razook, L. A. de Figueiredo, and J. N. S. G. Cyrillo. 1997. Carcass characteristics and composition of Bos indicus with different selection index in performance test evaluations. Page 3 in Anais da XXXIV Reunião da SBZ. Juiz de Fora, MG, Brazil. SBZ.

3.6. **Tedeschi, L. O.**, C. Boin, R. F. Nardon, and P. R. Leme. 1997. Effects of winter and whole year concentrate supplementation on gain up to slaughter weight of Guzera and Guzera crossbred steers grazing P. maximum. In: Annual Meeting of American Society of Animal Science, 89., Nashville, ASAS, p. 171.

3.7. **Tedeschi, L. O.**, C. Boin, R. F. Nardon, and P. R. Leme. 1997. Growth curve analysis of Guzera and Guzera crossbred cows and steers fed under grazing with or without concentrate supplementation. In: Annual Meeting of American Society of Animal Science, 89., Nashville, ASAS, p. 171.

4. 1998

4.1. Beltrame Filho, J. A., W. Henrique, P. R. Leme, **L. O. Tedeschi**, G. F. Alleoni, and D. P. D. Lanna. 1998. Desempenho e composição corporal de bovinos em crescimento alimentados com o sub-produto concentrato da produção de lisina. Simpósio de Iniciação Científica da Universidade de São Paulo, 6., Piracicaba, p. 20

4.2. Beltrame Filho, J. A., **L. O. Tedeschi**, D. A. Capelari, F. G. Ribeiro, A. A. F. B. José, and D. P. D. Lanna. 1998. Comparação entre dietas de custo mínimo e lucro máximo para ruminantes em diferentes cenários de produção. In: Reunião da Sociedade Brasileira para o Progresso da Ciência. Fortaleza, Fortaleza, p. 530.

4.3. Nardon, R. F., A. G. Razook, A. A. M. Sampaio, **L. O. Tedeschi**, L. A. Figueiredo, C. Boin, and M. L. A. Lima. 1998. Efeito da seleção para peso pós-desmama e de raças no rendimento em cortes da carcaça e na qualidade da carne de bovinos. In: Reunião da Sociedade Brasileira de Zootecnia, 35., Botucatu, SBZ, 1998.

5. 1999

5.1. Barioni, L. G., **L. O. Tedeschi**, and D. P. D. Lanna. 1999. A combination of linear and nonlinear optimisation algorithms to maximise net return in feedlots. In: Proceedings of the International Congress of Modelling and Simulation, 2., Hamilton, New Zealand.

5.2. Nardon, R. F., A. A. M. Sampaio, A. G. Razook, **L. O. Tedeschi**, C. Boin, L. A. Figueiredo, and M. L. P. Lima. 1999. Equações de estimativa da quantidade de músculo e de gordura na carcaça de garrotes zebuínos e taurinos. In: Reunião da Sociedade Brasileira de Zootecnia, 36., Porto Alegre, SBZ, p. 333.

5.3. Nardon, R. F., A. A. M. Sampaio, A. G. Razook, **L. O. Tedeschi**, L. A. Figueiredo, C. Boin, and M. L. P. Lima. 1999. Effect of selection for weight on body composition and carcass characteristics of Bos indicus and Bos Taurus. In: Annual Meeting of American Society of Animal Science, 91., Indianapolis, ASAS, p. 162.

5.4. **Tedeschi, L. O.**, D. G. Fox, and J. B. Russell. 1999. Accounting for the effects of a ruminal nitrogen deficiency within the structure of the Cornell Net Carbohydrate

and Protein System. In: Annual Meeting of American Society of Animal Science, 91., Indianapolis, ASAS, p. 260.

6. 2001

6.1. Ruiz, R., **L. O. Tedeschi**, and Fox, D. G. 2001. The effect on milk production of a ruminal nitrogen (N) deficiency in dairy cows: evaluation of the Cornell Net Carbohydrate and Protein System (CNCPS) ruminal N deficiency adjustment. In: Annual Meeting of American Society of Animal Science, 93., Indianapolis, ASAS, p. 162.

6.2. **Tedeschi, L. O.**, D. G. Fox, C. Boin, P. R. Leme, and G. F. Alleoni. 2001. Effect of intake level on the body composition and net energy requirements of Nellore steers and bulls for maintenance and growth. In: Annual Meeting of American Society of Animal Science, 93., Indianapolis, ASAS, p. 236.

7. 2002

7.1. Russell, J. B., T. V. Muscato, and **L. O. Tedeschi**. 2002. Autoclaved ruminal fluid immediately after birth improves the growth and health of neonate dairy calves. In: Annual Meeting of American Society of Animal Science, 94., Quebec City, Canada, ASAS, p. 246.

8. 2003

8.1. Barioni, L. G., D. P. Lana, **L. O. Tedeschi**, and R. F. Veloso. 2003. Método para formulação de dietas de bovinos de corte pelo critério de minimização do custo de alimentação (Method of diet formulation for beef cattle using the criteria of minimization of feeding costs). In: Reunião da Sociedade Brasileira de Zootecnia, 40., Santa Maria, SBZ, (CD-ROM)

8.2. Cannas, A., D. G. Fox, **L. O. Tedeschi**, A. N. Pell, and P. J. Van Soest. 2003. A mechanistic model to predict nutrient requirements and feed biological values for sheep in each unique production situation. Page 346 in European Association for Animal Production, 54th, Rome, Italy. EAAP.

8.3. Molina, D. O., I. Matamoros, Z. Almeida, **L. O. Tedeschi**, and A. N. Pell. 2003. Evaluation of the DMI predictions of the Cornell Net Carbohydrate and Protein System model with Holstein and dual-purpose lactating cattle in the tropics. In: Annual Meeting of American Society of Animal Science, 95., Phoenix, AZ, ASAS, p. 123.

8.4. **Tedeschi, L. O.** and D. G. Fox, 2003. Development and evaluation of a growth model to assist individual cattle management. In: Annual Meeting of American Society of Animal Science, 95., Phoenix, AZ, ASAS, p. 97.

9. 2004

9.1. Fox, D. G., T. P. Tylutki, and **L. O. Tedeschi**. 2004. Reducing environmental impact of cattle through precision feeding. In: Annual Meeting of American Society of Animal Science, 96., Saint Louis, MO, ASAS, p. 403.

9.2. Lanzas, C., **L. O. Tedeschi**, and Fox, D.G. 2004. Sensitivity analysis of the 2001 Dairy NRC and CNCPS protein fractionation systems. In: Annual Meeting of American Society of Animal Science, 96., Saint Louis, MO, ASAS, p. 306.

9.3. Manella, M. Q., C. Boin, G. F. Alleoni, J. J. A. A. Demarchi, and **L. O. Tedeschi**. 2004. Amino acids degradation of rumen incubated feeds. In: Annual Meeting of American Society of Animal Science, 96., Saint Louis, MO, ASAS, p. 208

9.4. Manella, M. Q., C. Boin, G. F. Alleoni, J. J. A. A. Demarchi, **L. O. Tedeschi**, R. A. Possenti, I. P. Otsuk, and P. C. A. Trivilin. 2004. Cinética de degradação dos alimentos corrigidos ou não para contaminação microbiana. In: Reunião Anual da

Sociedade Brasileira de Zootecnia, 41., Campo Grande, MS, Brasil, Sociedade Brasileira de Zootecnia, 6 pp.

9.5. Seo, S., **L. O. Tedeschi**, C. Schwab, and D. G. Fox. 2004. Predicting feed passage rate in dairy cattle. In: Annual Meeting of American Society of Animal Science, 96., Saint Louis, MO, ASAS, p. 462.

9.6. **Tedeschi, L. O**., D. G. Fox, M. J. Baker, and K. L. Long. 2004. A mechanistic nutrition model to evaluate beef cow efficiency. In: Annual Meeting of American Society of Animal Science, 96., Saint Louis, MO, ASAS, p. 252.

10. 2005

10.1. Baker, M.; **L. O. Tedeschi**; D. G. Fox; W. Henning. 2005. Using ultrasound measurements to determine body composition of yearling bulls. In: Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Cincinnati, OH, FASS, p. 114

10.2. Lanzas, C.; **L. O. Tedeschi**; D. G. Fox. 2005. Impact of the level of aggregation of feed carbohydrate (CHO) fractions on predictions of the Cornell Net Carbohydrate and Protein System (CHCPS). In: Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Cincinnati, OH, FASS, p. 392

10.3. Seo, S.; **L. O. Tedeschi**; C. G. Schwab; D. G. Fox. 2005. Development and evaluation of empirical equations to predict feed passage rate in cattle. In: Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Cincinnati, OH, FASS, p. 190

11. 2006 (Assistant Professor at TAMU)

11.1. Baker, M.; **L. O. Tedeschi**; D. G. Fox; W. R. Henning; D. J. Ketchen. 2006. Using ultrasound to determine body composition of breeding heifers. Page 146 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.2. Bourg, B.; **L. O. Tedeschi**; G E. Carstens; E. Brown; D. G. Fox. 2006. Evaluation of a mathematical model to estimate total feed required for pen-fed Santa Gertrudis steers and heifers based on performance and diet composition. Page 145 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.3. Bourg, B., **L. O. Tedeschi**, G. E. Carstens, P. A. Lancaster, and D. G. Fox. 2006. Meta-analysis of CVDS model predictions of feed intake and efficiency in growing and finishing cattle. Page 108 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC. Abstracts. San Antonio, TX: PNC.

11.4. Brown, E. G., **L. O. Tedeschi**, G. E. Carstens, P. A. Lancaster, D. G. Fox, T. D. A. Forbes, R. D. Randel, T. H. Welsh, and F. M. Rouquette. 2006. Meta-analysis of residual feed intake with and without adjustment for carcass composition in growing and finishing calves. Journal of Animal Science. 84 (Suppl. 2):39.

11.5. Cannas, A.; **L. O. Tedeschi**; D. G. Fox. 2006. Small Ruminant Nutrition System: a computer model to predict sheep nutrient requirements and feed biological values on farms. Page 376 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.6. Chizzotti, F. H. M.; O. G. Pereira; **L. O. Tedeschi**; S. C. Valadares Filho; M. L. Chizzotti; L. Moura; I. C. S. Belo; D. H. Pereira. 2006. Intake, digestibility, and performance of steers fed diets containing increasing levels of urea. Page 216 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.7. Chizzotti, M. L.; **L. O. Tedeschi**; S. C. Valadares Filho; G. E. Carstens; F. H. M. Chizzotti; P. Amaral; T. Ikegami; D. Moura; P. D. B. Benedeti. 2006. Net requirements of macrominerals for growth of steers, bulls, and heifers of Nellore x Red Angus crossbreds. Page 224 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN. ASAS.

11.8. Chizzotti, M. L.; S. C. Valadares Filho; **L. O. Tedeschi**; G. E. Carstens; F. H. M. Chizzotti; P. M. Amaral; T. I. Rodrigues; D. M. Oliveira; P. D. B. Benedeti. 2006. Comparison of requirements for net protein for growth of bulls, steers, and heifers of Nellore x Red Angus crossbreds. Page 223 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.9. Chizzotti, M. L.; S. C. Valadares Filho; **L. O. Tedeschi**; G. E. Carstens; F. H. M. Chizzotti; D. M. Oliveira; P. D. B. Benedeti; P. M. Amaral; T. I. Rodrigues. 2006. Comparison of energy requirements for maintenance and growth of steers, bulls, and heifers of Nellore x Red Angus crossbreds. Page 223 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.10. Chizzotti, M.L.; S.C. Valadares Filho; **L. O. Tedeschi**; G E. Carstens; F.H.M. Chizzotti; P.D.B. Benedeti; P.M.Amaral; T.I. Rodrigues; D.M. Oliveira; M.A. Fonseca; L.C. Silva; M.I. Marcondes. 2006. Energy and protein requirements for maintenance and growth of F1 Nellore x Red Angus bulls, steers, and heifers fed high-forage diets. Pages 112-113 in Plains Nutrition Council, San Antonio, TX, Plain Nutrition Council.

11.11. Fernandes, J. S. Jr; K. T. Resende; J. J. R. Fernandes; **L. O. Tedeschi**; R. A. Reis; M. H. M. R. Fernandes; H. M. Silva. 2006. Effect of high and low residual herbage mass of a tropical pasture grazed by goats. 1. Grazing behavior. Page 323 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.12. Fernandes, J. S. Jr; K. T. Resende; M. H. M. R. Fernandes; **L. O. Tedeschi**; R. A. Reis; J. J. R. Fernandes; F. S. Gonçalves. 2006. Effect of high and low residual herbage mass of a tropical pasture grazed by goats. 2. Sward structure. Page 323 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.13. Fernandes, M. H. M. R.; K. T. Resende; **L. O. Tedeschi**; J. S. Fernandes Jr.; H. M. Silva; G. E. Carstens; I. A. M. A. Teixeira. 2006. Energy and protein requirements for maintenance and growth of Boer crossbred kids. Page 25 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.14. Fernandes, M.H.M.R., K.T. Resende, **L. O. Tedeschi**, J.S. Fernandes* Jr., H.M. Silvba, G.E. Carstens, I.A.M.A. Teixeira. 2006. Energy and protein requirements for maintenance and growth of Boer crossbred kids. Pages 115-117 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC. Abstracts. San Antonio, TX: PNC.

11.15. Kirschten, D. P.; E. J. Pollak; **L. O. Tedeschi**; D. G. Fox; D. Bourg; G. E. Carstens. 2006. Use of a mathematical computer model to predict feed intake: Genetic parameters of observed and predicted values, and relationships with other traits. Page 447 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.16. Lancaster, P. A., G. E. Carstens, **L. O. Tedeschi**, E. G. Brown, and B. Bourg*. 2006. Meta-analysis of feed efficiency and carcass composition traits in growing and

finishing cattle. Pages 120-121 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

11.17. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. H. M. R. Fernandes. 2006. Evaluation of feed efficiency traits and their relationships with carcass ultrasound and feeding behavior traits in Brahman heifers. Pages 127-128 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

11.18. Ribeiro, F. R. B.; G. E. Carstens; P. A. Lancaster; **L. O. Tedeschi**; M. H. M. R. Fernandes. 2006. Evaluation of feed efficiency traits in growing Brahman heifers and relationship with body composition ultrasound traits and feeding behavior. Page 123 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.19. Seo, S.; C. Lanzas; **L . O. Tedeschi**; D. G. Fox. 2006. Development of a mechanistic model to understand the dynamics of liquid flow out of the reticulo-rumen in cattle. Page 142 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.20. Seo, S.; **L. O. Tedeschi**; D. G. Fox. 2006. Development and evaluation of a mechanistic model to predict liquid passage from the reticulo-rumen of cattle. Page 198 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.21. Teixeira, I. A. M. A.; K. T. Resende; J. M. Pereira Filho; M. M. Salin; R. A. Gomes; R. C. Canesin; **L. O. Tedeschi**. 2006. Can the chemical composition of the whole body of a goat be estimated from parts of its body? Page 359 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

11.22. Vasconcelos, J. T., J. E. Sawyer, L. W. Greene, F. T. McCollum III, S. B. Smith, and **L. O. Tedeschi**. 2006. Effects of different growing systems on rate of accretion of intramuscular and subcutaneous adipose tissue in feedlot cattle. Page 131 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

11.23. Vasconcelos, J. T.; J. E. Sawyer; **L. O. Tedeschi**; L. W. Greene; F. T. McCollum, III. 2006. Effects of different growing systems on performance of feedlot cattle. Page 220 in Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Minneapolis, MN, ASAS.

12. 2007

12.1. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, G. F. Alleoni, F. D. Resende, L. A. Figueiredo, and R. F. Nardon. 2007. Effects of selection for post-weaning BW gain on carcass characteristics of Bos indicus and tropical adapted Bos taurus breeds. Page 14 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.2. Bourg, B. M., **L. O. Tedeschi**, and M. S. Brown. 2007. Evaluation of a mathematical model to estimate total feed required for pen-fed animals based on performance and diet information. Pages 87-88 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

12.3. Bourg, B., G. E. Carstens, Z. Paddock, **L. O. Tedeschi**, and W. Maffei. 2007. Relationships between temperament traits and feed efficiency in growing bulls. Page 30 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.4. Bourg, B., **L. O. Tedeschi**, M. S. Brown, and G. E. Carstens. 2007. Evaluation of a mathematical model to estimate total feed required for pen-fed animals based on

performance and diet information. Pages 665-666 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.5. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, D. G. Fox. 2007. Prediction of the growth rate of kids with the Small Ruminant Nutrition System model. Page 1-3 in Brazilian Society of Animal Science, Jaboticabal, SP, SBZ.

12.6. Cannas, A., **L. O. Tedeschi**, and D. G. Fox. 2007. The Small Ruminant Nutrition System: development of a goat submodel. Page 505 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.7. Chizzotti, F. H. M., M. L. Chizzotti, **L. O. Tedeschi**, O. G. Pereira, and S. C. Valadares Filho. 2007. Meta-analysis of the effects of dietary urea levels on performance, digestibility, and N metabolism in crossbred steers. Page 31 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.8. Chizzotti, F. H. M., O. G. Pereira, S. C. Valadares Filho, M. L. Chizzotti, **L. O. Tedeschi**, M. I. Leão, and D. H. Pereira. 2007. Intake, digestibility, ruminal parameters, and microbial protein synthesis in crossbred steers fed diets based on grass and sorghum silages. Page 15 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.9. Chizzotti, M. L., **L. O. Tedeschi**, S. C. Valadares Filho, P. D. B. Benedeti, P. M. Amaral, and T. I. Rodrigues. 2007. Protein requirements for maintenance and growth of purebred and crossbred Bos indicus: A meta-analysis evaluation. Pages 30-31 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.10. Chizzotti, M. L., **L. O. Tedeschi**, S. C. Valadares Filho, P. V. R. Paulino, F. H. M. Chizzotti, and G. E. Carstens. 2007. Energy requirements for maintenance and growth of purebred and crossbred Bos indicus: A meta-analysis evaluation. Page 30 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.11. Chizzotti, M. L., S. C. Valadares Filho, R. F. D. Valadares, F. H. M. Chizzotti, **L. O. Tedeschi**, M. I. Marcondes, and M. A. Fonseca. 2007. Determination of creatinine excretion and evaluation of spot urine sampling to assess purine derivative excretion. Page 21 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.12. Fernandes, M.H.M. da R., K.T. de Resende, **L. O. Tedeschi**, J. de Souza Fernandes Junior, I. A. M. A. Teixeira, H. M. da Silva. 2007. Requirements of calcium and phosphorus for maintenance and growth of 3/4 Boer 1/4 Saanen kids. Page 1-3 in Brazilian Society of Animal Science, Jaboticabal, SP, SBZ.

12.13. Gomez, R. R., B. M. Bourg, Z. D. Paddock, G. E. Carstens, P. A. Lancaster, R. K. Miller, **L. O. Tedeschi**, D. K. Lunt, S. A. Moore, and D. S. DeLaney. 2007. Evaluation of feed efficiency in Santa Gertrudis steers and relationships with temperament and feeding behavior traits. Page 454 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.14. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2007. Development of a dairy goat model to study the impact of management strategies on the dynamics of herds. Page 39 in Southern section of American Society of Animal Science, Mobile, AL. ASAS-ADSA.

12.15. Gutiérrez-Bañuelos, H., R. C. Anderson, G. E. Carstens, **L. O. Tedeschi**, E. Cabrera-Diaz, T. R. Callaway, and D. J. Nisbet. 2007. Effects of nitroethane and monensin on ruminal CH4 production and nitro-degrading bacterial populations in vitro. Page 175 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.16. Kononoff, P. J., **L. O. Tedeschi**, M. L. Chizzotti, J. M. Kelzer, K. Karges, and M. L. Gibson. 2007. Evaluation of ruminal fermentability of corn milling co-products using in vitro gas production. Page 350 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.17. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. E. Davis. 2007. Relationships between feed efficiency, carcass and ultrasound traits in Angus beef cattle divergently selected for serum IGF-I concentration. Page 108 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.18. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. E. Davis. 2007. Relationships of feed efficiency with carcass and non-carcass tissue composition in Angus bulls and heifers. Pages 107-108 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

12.19. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. E. Davis. 2007. Relationships between feed efficiency, carcass and ultrasound traits in Angus beef cattle divergently selected for serum IGF-I concentration. Page 550 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.20. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. E. Davis. 2007. Relationships of feed efficiency with carcass and non-carcass tissue composition in Angus bulls and heifers. Page 455 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

12.21. Ribeiro, F. R. B., **L. O. Tedeschi**, J. Stoffer, and G. E. Carstens. 2007. A novel technique to assess internal body fat using real-time ultrasound. Page 601 in American Society of Animal Science, San Antonio, TX. ASAS-ADSA.

13. 2008

13.1. Baker, M., D. G. Fox, W. R. Henning, **L. O. Tedeschi,** and D. J. Ketchen. 2008. Development of a natural beef production and marketing program for Holstein bull calves. Page 381-382 in American Society of Animal Science, Indianapolis, IN. ASAS.

13.2. Baker, M., D. G. Fox, and **L. O. Tedeschi**. 2008. Application of computer models in evaluating alternatives to reduce excess nutrients on a beef farm. Page 324 in American Society of Animal Science, Indianapolis, IN. ASAS.

13.3. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, L. A. Figueiredo, R. F. Nardon, and G. F. Alleoni. 2008. Estimation of carcass and empty body chemical composition of Nellore and Caracu breeds. Page 429 in American Society of Animal Science, Indianapolis, IN. ASAS.

13.4. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, L. A. Figueiredo, and G. F. Alleoni. 2008. Carcass characteristics of Nellore, Gir, Guzerah, and Caracu bulls selected for post-weaning weight. Pages 1-3 in Brazilian Society of Animal Science, Lavras, MG, Brasil. RBZ.

13.5. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and D. G. Fox. 2008. The Small Ruminant Nutrition System (SRNS) model for prediction of energy and protein requirements of goats and sheep. Page 187 in American Society of Animal Science, Indianapolis, IN. ASAS.

13.6. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and D. G. Fox. 2008. The Small Ruminant Nutrition System, a nutrition model to account for dietary supply and requirements of nutrients for sheep and goats. Page 230 in European Association for Animal Production, 59th, Vilnius, Lithuania. EAAP.

13.7. Chizzotti, M. L., S. C. Valadares Filho, **L. O. Tedeschi**, and P. V. R. Paulino. 2008. Estimativa de eficiência de utilização da energia metabolizável através da

composição do ganho. Pages 1-3 (CDROM) in Reunião Anual da Sociedade Brasileira de Zootecnia, 45, Lavras, MG (Brazil). SBZ.

13.8. de Oliveira, D. E., M. P. Soares, F. J. Bianchett, R. Fornazier, M. R. Fachinello, M. Girardi, D. Fernandes, D. Soster, M. Gama, M. G. C. D. Peixoto, S. O. Juchem, and **L. O. Tedeschi**. 2008. Unprotected conjugated linoleic acid (CLA) negatively affects milk production and secretion of milk components in dairy ewes. Page 438 in American Dairy Society Association, Indianapolis, IN. ADSA.

13.9. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2008. A dairy goat model to study the impact of management strategies on herd dynamics. Page 176 in Proceedings of the 9th International Conference on Goats, Queretaro, Mexico. International Goat Association.

13.10. Guimarães, V. P., **L. O. Tedeschi**, and M. T. Rodrigues. 2008. Study the impact of breeding seasons in the dynamics of dairy goat herds. Page 175 in Proceedings of the 9th International Conference on Goats, Queretaro, Mexico. International Goat Association.

13.11. Henrique, W., T. M. da Silva, A. S. Farraudo, A. A. M. Sampaio, D. Perecini, and **L. O. Tedeschi**. 2008. Exploratory analysis of growth performance of beef cattle in feedlot during the finishing phase using mathematical modeling. Pages 1-3 (CDROM) in Reunião Anual da Sociedade Brasileira de Zootecnia, 45, Lavras, MG (Brazil). SBZ.

13.12. Ribeiro, F. R. B., R. K. Miller, E. G. Brown, P. A. Lancaster, **L. O. Tedeschi**, S. Moore, D. DeLaney, and G. E. Carstens. 2008. Relationships between residual feed intake and carcass-quality traits in Santa Gertrudis steers. Page 181 in American Society of Animal Science, Indianapolis, IN. ASAS.

13.13. Ribeiro, F. R. B., **L. O. Tedeschi**, J. R. Stouffer, and G. E. Carstens. 2008. A revised analysis to estimate total internal fat in beef cattle using live animal and carcass measurements. Pages 127-128 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

13.14. **Tedeschi, L. O.**, P. J. Kononoff, K. Karges, and M. Gibson. 2008. Dynamics of ruminal fiber digestion of corn milling co-products. Page 90-91 in American Dairy Society Association, Indianapolis, IN. ADSA.

14. 2009

14.1. Aguiar, A. D., **L. O. Tedeschi**, F. M. Rouquette, Jr., T. D. A. Forbes, C. M. Hensarling, and R. D. Randel. 2009. Predicting dry matter intake of grazing Brahman bulls selected for high and low feed efficiency. Page 223 in American Society of Animal Science, Montreal, Canada. ASAS.

14.2. Aguiar, A. D., **L. O. Tedeschi**, F. M. Rouquette, Jr., A. Ortega, D. S. Delaney, and S. Moore. 2009. Using in vitro gas production technique to calculate total digestible nutrients value of native forage in southern Texas. Pages 37-38 in American Society of Animal Science, Montreal, Canada. ASAS.

14.3. Allen, C. C., X. Li, **L. O. Tedeschi**, H. Zhou, J. A. Paschal, T. E. Spencer, U. M. Braga-Neto, D. H. Keisler, M. Amstalden, and G. L. Williams. 2009. Dietary treatments that facilitate early onset of puberty in heifers alter gene expression in the arcuate nucleus Page 489 in Society for the Study of Reproduction, Pittsburgh, Pennsylvania. Society for the Study of Reproduction.

14.4. Bourg, B., **L. O. Tedeschi**, and J. M. Tricarico. 2009. Effects of a slow-release urea product on performance and carcass characteristics of growing cattle fed steam

flaked corn Page 342 in American Society of Animal Science, Montreal, Canada. ASAS.

14.5. Bourg, B., **L. O. Tedeschi**, T. A. Wickersham, and J. M. Tricarico. 2009. Effects of Optigen II on performance and N balance of growing cattle fed steam-flaked corn. in Alltech Symposium, Lexington, KY.

14.6. Bourg, B., T. A. Wickersham, **L. O. Tedeschi**, and J. M. Tricarico. 2009. Effects of a slow-release urea product on the N balance of growing cattle fed steam-flaked corn. Pages 341-342 in American Society of Animal Science, Montreal, Canada. ADSA.

14.7. Cannas, A., A. Linsky, L. J. Erasmus, **L. O. Tedeschi**, W. A. van Niekerk, and R. Coertze. 2009. Evaluation of performance predictions of the Small Ruminant Nutrition System model using growth and body composition data of South African Mutton Merino and Dorper. Page 522 in American Society of Animal Science, Montreal, Canada. ASAS.

14.8. Henrique, W., A. S. Ferraudo, A. A. M. Sampaio, D. Perecini, T. M. da Silva, and **L. O. Tedeschi**. 2009. Characterization of male bovines of different genetic groups finished in feedlot using neural network. in Reunião Anual da Sociedade Brasileira de Zootecnia, 45, Maringá, PR (Brazil). SBZ.

14.9. Krueger, N. A., R. C. Anderson, **L. O. Tedeschi**, and D. J. Nisbet. 2009. Effects of feeding glycerol on fermentation kinetics of alfalfa hay. Page 87 in American Society of Animal Science, Montreal, Canada. ASAS.

14.10. Lanna, D. P. D., P. R. Leme, F. G. F. Castro, A. C. Vieira, V. M. Quecini, **L. O. Tedeschi**, and J. L. V. Coutinho Filho. 2009. Effect of the beta-agonist RU-42173 on growth and body composition of bulls. Page 323 in American Society of Animal Science, Montreal, Canada.

14.11. Lewis, J. B., K. J. Jenkins, J. M. Patterson, N. A. Cole, J. B. Osterstock, **L. O. Tedeschi**, and J. C. MacDonald. 2009. Effects of corn processing method and wet distiller's grains plus solubles inclusion and source on ruminal pH and in situ digestibility of crossbred steers. Page 40 in American Society of Animal Science, Montreal, Canada. ASAS.

14.12. Mendes, E. D. M., G. E. Carstens, **L. O. Tedeschi**, and Z. D. Paddock. 2009. Evaluation of feed efficiency and carcass traits in Bos indicus composite and Angus finishing heifers. Page 28 in American Society of Animal Science, Montreal, Canada. ASAS.

14.13. Pagán-Riestra, S., J. P. Muir, B. D. Lambert, **L. O. Tedeschi**, and L. Redmon. 2009. Phosphorus and other nutrient disappearance from plants containing condensed tannins using the mobile nylon bag technique. Page 162 in American Dairy Society Association, Montreal, Canada. ADSA.

14.14. Ribeiro, F. R. B., R. D. Rhoades, **L. O. Tedeschi**, S. B. Smith, S. E. Martin, and S. F. Crouse. 2009. Evaluating the application of dual x-ray energy absorptiometry (DEXA) to assess dissectible fat and muscle from the 9-11th rib section of beef cattle. Page 55 in American Society of Animal Science, Montreal, Canada. ASAS.

14.15. Ribeiro, F. R. B., **L. O. Tedeschi**, J. R. Stouffer, and G. E. Carstens. 2009. Re-evaluating the technique of estimating total internal fat using real-time ultrasound and carcass measurements in beef cattle. Page 478 in American Society of Animal Science, Montreal, Canada. ASAS.

14.16. **Tedeschi, L. O.**, G. Holub, W. Chalupa, and C. A. Macgregor. 2009. Determination of ruminal protein degradation kinetics of Soy Best(r) with and without soy gums using dynamic modeling and a single point in situ protein disappearance and simulations

with the CPM Dairy nutrition model. Page 478 in American Dairy Society Association, Montreal, Canada. ADSA.

15. 2010

15.1. Aguiar, A. D., **L. O. Tedeschi**, F. M. Rouquette, T. D. A. Forbes, and C. M. R. Hensarling, R.D. 2010. Statistical variation in predicting dry matter intake of Brahman bulls using the n-alkane technique. Page 57 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.2. Aguiar, A., **L. O. Tedeschi**, K. C. McCuistion, D. S. DeLaney, and S. Moore. 2010. Predicting ME and metabolizable protein (MP) balances of Santa Gertrudis cows under grazing conditions using a nutrition model. Page 160 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.3. Baldin, M., R. Dresch, J. Souza, E. C. Sandri, F. Batistel, E. Ticiani, A. Panzera, **L. O. Tedeschi**, M. A. S. Gama, D. Fernandes, and D. E. Oliveira. 2010. Milk yield and composition from dairy ewes fed two sources of lipid supplement associated or not with conjugated linoleic acid (CLA). Page 167 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.4. Bourg, B. M., **L. O. Tedeschi**, A. D. Aguiar, F. R. B. Ribeiro, R. R. Gomez, J. Genho, D. DeLaney, and S. Moore. 2010. Using a mechanistic nutrition model to identify efficient beef cows under grazing conditions. Pages E18-E32 in Beef Cattle Short Course, College Station, TX. Texas A&M University.

15.5. Clark, K. J., P. J. Kononoff, and **L. O. Tedeschi**. 2010. Evaluation of estimated diet energy intake and impact on energy use of the lactating dairy cow. Page 719 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.6. Fernandes, H. J., **L. O. Tedeschi**, M. F. Paulino, A. G. Silva, and L. M. Paiva. 2010. Comparison of mathematical functions to describe the growth of grazing bulls in tropical conditions. Page 635 in American Society of Animal Science, Denver, CO. ASAS/ADSA.

15.7. Fernandes, H. J., **L. O. Tedeschi**, M. F. Paulino, M. O. Porto, and L. M. Paiva. 2010. Canonical relationships of body shape of grazing bulls under tropical conditions. Page 635 in American Society of Animal Science, Denver, CO. ASAS/ADSA.

15.8. Fernandes, M. H. M. R., K. T. Resende, **L. O. Tedeschi**, J. S. Fernandes, Jr., and I. A. M. A. Teixeira. 2010. Calcium and phosphorus requirements for maintenance and growth of Boer crossbred kids. Pages 456-457 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.9. Fernandes, M. H. M. R., K. T. Resende, **L. O. Tedeschi**, J. S. Fernandes, Jr., and I. A. M. A. Teixeira. 2010. Requirements of magnesium, potassium, and sodium for maintenance and growth of Boer crossbred kids. Page 456 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.10. Forbes, T. D. A., F. M. Rouquette, **L. O. Tedeschi**, R. D. Randel, and F. R. B. Ribeiro. 2010. A comparison of anatomical and compositional differences of residual feed intake (RFI)-indexed Brahman bulls grazing conditions. Page 57 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.11. Gentil, R. S., I. Susin, A. Cannas, A. V. Pires, C. Q. Mendes, E. M. Ferreira, G. H. Rodrigues, A. S. Atzori, and **L. O. Tedeschi**. 2010. Prediction of rumen pH and digestibility of diets containing soybean hulls fed to ram lambs by the Small Ruminant Nutrition System. Page 730 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.12. Hughes, C. A., J. A. Carter, T. D. A. Forbes, F. M. Rouquette, Jr., **L. O. Tedeschi**, R. D. Randel, and F. R. B. Ribeiro. 2010. Use of real-time ultrasound (RTU) measurements and carcass traits to assess internal fat in residual feed intake (RFI)-indexed Brahman bulls under grazing conditions. Page 700 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.13. Mendes, E., G. E. Carstens, and **L. O. Tedeschi**. 2010. Characterization of feeding behavior traits and associations with feed efficiency in beef heifers fed a high-grain diet. Page 791 in American Dairy Science Association, Denver, CO. ASAS/ADSA.

15.14. Mendes, E., G. E. Carstens, and **L. O. Tedeschi**. 2010. Evaluation of feed behavior traits in beef heifers using a GrowSafe intake measurement system. Page 18 in American Society of Animal Science, Denver, CO. ASAS/ADSA.

15.15. Mendes, E., G. E. Carstens, and **L. O. Tedeschi**. 2010. Variação na eficiência alimentar e características do comportamento de novilhas alimentadas com dietas de alto concentrado. in XV Congresso Mundial da Raça Brahman, Uberaba, MG, Brasil.

15.16. Souza, J., M. Baldin, R. Dresch, E. C. Sandri, F. Batistel, E. Ticiani, A. Panzera, **L. O. Tedeschi**, M. A. S. Gama, D. Fernandes, and D. E. Oliveira. 2010. Milk yield and composition of Lacaune dairy ewes fed two lipid supplements associated or not with conjugated linoleic acid (CLA). XXVI World Buriatrics Congress, Santiago, Chile.

15.17. Turner, B. L., **L. O. Tedeschi**, R. D. Hanagriff, and R. D. Rhoades. 2010. A cow-calf model to evaluate the dynamics of different marketing strategies. Page 604 in Proceedings of the 2010 Meeting of the Animal Science Modelling Group, v. 90. J. France, E. Kebreab and J. A. Metcalf, eds. Indianapolis, IN. Agricultural Institute of Canada.

16. 2011 (Associate Professor at TAMU)

16.1. Alves, B. R. C., S. Liu, E. Stevenson, R. C. Cardoso, J. F. Thorson, **L. O. Tedeschi**, D. H. Keisler, G. L. Williams, and M. Amstalden. 2011. Accelerated body weight gain during the juvenile period reduces neuropeptide y close contacts with GNRH neurons in heifers. Page 191 in 44th Annual Meeting of the Society for the Study of Reproduction, v. 85. Portland, OR. Society for the Study of Reproduction. Available at: http://www.biolreprod.org/cgi/content/meeting_abstract/85/1_MeetingAbstracts/191

16.2. Atzori, A. S., A. Cannas, and **L. O. Tedeschi**. 2011. The development of a dynamic model using System Dynamics methodology to evaluate strategies to reduce greenhouse gas (GHG) emissions from dairy cows. Page 73 in Proceedings of the International Dairy Federation (IDF) World Dairy Summit, Parma, Italy.

16.3. Atzori, A. S., A. Cannas, and **L. O. Tedeschi**. 2011. Ranking dairy farms for profitability using stochastic modeling and farm-level inputs. Page 50 in Proceedings of the International Dairy Federation (IDF) World Dairy Summit, Parma, Italy.

16.4. Atzori, A. S., A. Cannas, and **L. O. Tedeschi**. 2011. A ranking system based on stochastic modeling to identify efficient dairy farms using farm-level inputs. Page 193 in American Society of Animal Science, New Orleans, LA. ASAS.

16.5. Atzori, A. S., **L. O. Tedeschi**, and A. Cannas. 2011. The dynamics in the dairy cattle sector: policies on cow milk production can reduce greenhouse gas emissions and land use. Page 31 in Proceedings of the International Conference of System Dynamics Society, 29th, Washington, DC. System Dynamics Society.

16.6. Atzori, A. S., **L. O. Tedeschi**, and A. Cannas. 2011. A System Dynamics approach to study policies on world milk production and greenhouse gas emissions in the dairy

cow sector. Pages 718-719 in Proceedings of the 2011 Meeting of the Animal Science Modeller's Group, New Orleans, LA. Agricultural Institute of Canada.

16.7. Bailey, J. C., G. E. Carstens, J. W. Behrens, R. K. Miller, J. T. Walter, A. N. Hafla, **L. O. Tedeschi**, and D. S. Hale. 2011. Effects of temperament classification and breed type on the feed efficiency, feeding behavior and carcass value traits in heifers fed a high-grain diet. Pages 87-88 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

16.8. Bailey, J. C., G. E. Carstens, J. T. Walter, A. N. Hafla, E. D. Mendes, **L. O. Tedeschi**, and R. K. Miller. 2011. Effects of residual feed intake classification and breed type on feed efficiency and feeding behavior traits in heifers fed a high grain diet. Page 761 in Southern Section of American Society of Animal Science, Corpus Christi, TX. ASAS.

16.9. Bailey, J. C., G. E. Carstens, J. T. Walter, A. N. Hafla, E. D. Mendes, **L. O. Tedeschi**, and R. K. Miller. 2011. Effects of temperament classification and breed type on feed efficiency and feeding behavior traits in heifers fed a high-grain diet. Pages 366-367 in American Society of Animal Science, New Orleans, LA. ASAS.

16.10. Bailey, J. C., **L. O. Tedeschi**, E. D. Mendes, and G. E. Carstens. 2011. Evaluation of bimodal distributions to determine meal criterion in heifers fed a high-grain diet. Page 366 in American Society of Animal Science, New Orleans, LA. ASAS.

16.11. Baker, M. J., **L. O. Tedeschi**, D. G. Fox, and G. Jacimovski. 2011. Effect of beef cow age and calf sex on model-predicted energy efficiency. Page 417 in American Society of Animal Science, New Orleans, LA. ASAS.

16.12. Behrens, J. W., R. K. Miller, J. C. Bailey, J. T. Walter, A. N. Hafla, E. D. Mendes, D. S. Hale, T. Machado, **L. O. Tedeschi**, and G. E. Carstens. 2011. Effects of residual feed intake classification and breed type on carcass characteristics, tenderness and value in feedlot heifers. Page 761 in American Society of Animal Science, New Orleans, LA. ASAS.

16.13. Behrens, J. W., R. K. Miller, D. S. Hale, J. T. Walter, J. C. Bailey, A. N. Hafla, T. Machado, **L. O. Tedeschi**, and G. E. Carstens. 2011. Effects of temperament classification on carcass characteristics, tenderness and value in Angus-based composite steers. Page 569 in American Society of Animal Science, New Orleans, LA. ASAS.

16.14. Bourg, B., **L. O. Tedeschi**, A. D. Aguiar, F. R. B. Ribeiro, J. Genho, R. R. Gomez, D. DeLaney, and S. Moore. 2011. Using a mechanistic nutrition model to identify efficient beef cows under grazing conditions. Page 416 in American Society of Animal Science, New Orleans, LA. ASAS.

16.15. Cordero, V. V., C. A. Cavinder, **L. O. Tedeschi**, and D. H. Sigler. 2011. Development of a nutritional model to predict digestible energy requirements for broodmares based on body condition changes. Page 674 in American Society of Animal Science, New Orleans, LA. ASAS.

16.16. Dose, C. S., P. J. Kononoff, T. C. Jenkins, **L. O. Tedeschi**, and K. Karges. 2011. A chemical evaluation of the chemical composition of four corn milling co-products with focus on fatty acids. Page 507 in American Society of Animal Science, New Orleans, LA. ASAS.

16.17. Fernandes, H. J., V. Siqueira, **L. O. Tedeschi**, G. C. Coelho, L. M. Paiva, C. Guaraldo, and J. C. Souza. 2011. Diurnal grazing behavior of cattle fed a concentrate supplement during the dry-rainy transition season in tropical conditions. Page 5 in American Society of Animal Science, New Orleans, LA. ASAS.

16.18. Macgregor, C. A., **L. O. Tedeschi**, and T. K. Miller-Webster. 2011. Evaluating the inclusion of Met and Lys to mechanically extracted soybean meal with soy gums on the ruminally-undegraded Met and Lys content. Page 393 in American Dairy Science Association, New Orleans, LA. ADSA.

16.19. Marcondes, M. I., **L. O. Tedeschi**, S. C. Valadares Filho, M. P. Gionbelli, and L. F. C. Silva. 2011. Defining maturity of Nellore cattle based on growth and body composition. Page 246 in American Society of Animal Science, New Orleans, LA. ASAS.

16.20. Pacheco Jr., A. J. D., F. A. P. Santos, C. M. M. Bittar, L. R. D. Agostinho Neto, R. A. M. Vieira, **L. O. Tedeschi**, B. C. Matos, and G. B. Mourão. 2011. Ruminal degradability of crude protein of Marandu grasses. Pages 52-53 in American Society of Animal Science, New Orleans, LA. ASAS.

16.21. Ramirez Ramirez, H. A., **L. O. Tedeschi**, T. R. Callaway, S. E. Dowd, K. Nestor, and P. J. Kononoff. 2011. Effect of feeding brown midrib corn silage and dried distillers' grains with solubles on bacterial diversity in rumen fluid of dairy cows using bacterial tag-encoded FLX amplicon pyrosequencing. Pages 381-382 in American Society of Animal Science, New Orleans, LA. ASAS.

16.22. Silva, A. G., H. J. Fernandes, **L. O. Tedeschi**, M. F. Paulino, S. A. Lopes, and A. A. Rocha. 2011. Different levels of urea in concentrate supplementation of grazing cattle during the transition period of dry to rainy seasons under tropical conditions. Page 107 in American Society of Animal Science, New Orleans, LA. ASAS.

16.23. Turner, B. L., **L. O. Tedeschi**, R. D. Hanagriff, and R. D. Rhoades. 2011. A revised cow-calf model to evaluate the dynamics of different marketing strategies. Page 716 in Proceedings of the 2011 Meeting of the Animal Science Modeller's Group, New Orleans, LA. Agricultural Institute of Canada.

16.24. Walter, J. T., J. C. Bailey, G. E. Carstens, A. N. Hafla, E. D. Mendes, and **L. O. Tedeschi**. 2011. Effects of residual feed intake classification on feed efficiency and feeding behavior traits in Angus based composite steers. Pages 118-119 in Plains Nutrition Council Spring Conference, San Antonio, TX. PNC.

16.25. Wiley, L. M., **L. O. Tedeschi**, T. D. A. Forbes, F. M. Rouquette, Jr., R. D. Randel, and S. E. Dowd. 2011. A comparison of ruminal and large intestinal microbial population of residual feed intake-indexed Brahman bulls under grazing conditions. Page 2 in Proceedings of the Southern section of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, v. 89. Corpus Christi, TX. Federation of Animal Science Societies.

17. 2012

17.1. Alves, B. R. C., R. C. Cardoso, **L. O. Tedeschi**, A. Caraty, G. L. Williams, and M. A. Amstalden. 2012. Accelerated body weight gain during the juvenile period alters the neuropeptide Y-kisspeptin circuitry in the hypothalamus of prepubertal heifers. 45th Annual Meeting of the Society for the Study of Reproduction, State College, PA. Society for the Study of Reproduction.

17.2. Atzori, A. S., **L. O. Tedeschi**, and A. Cannas. 2012. Policy modeling for greenhouses gas emissions on dairy cattle sector: The importance of the milk production improvement. Page 25 in Proceedings of the 30th International Conference of System Dynamics Society, St. Gallen, Switzerland. System Dynamics Society.

17.3. Baker, M. J., M. L. Thonney, **L. O. Tedeschi**, G. Jacimovski, and L. M. Furman. 2012. Animal performance on pastures managed at two forage heights to produce grass

finished beef. Pages 29-30 in American Society of Animal Science, Phoenix, AZ. FASS.

17.4. Bomfim, M. A. D., **L. O. Tedeschi**, and N. D. de Paula. 2012. Factors affecting dry matter intake of grazing goats in the Brazilian rangelands. Page 439 in American Society of Animal Science, Phoenix, AZ. FASS.

17.5. Cardoso, R. C., B. R. C. Alves, L. D. Prezotto, J. F. Thorson, **L. O. Tedeschi**, D. H. Keisler, M. Amstalden, and G. L. Williams. 2012. Accelerated body weight gain during the juvenile period as a model to assess NPY and kisspeptin control of puberty in heifers. 45th Annual Meeting of the Society for the Study of Reproduction, State College, PA. Society for the Study of Reproduction.

17.6. Chay-Canul, A. J., J. C. Ku-Vera, A. J. Ayala-Burgos, J. G. Magaña-Monforte, and **L. O. Tedeschi**. 2012. Prediction of empty body weight of adult Pelibuey ewes. Pages 364-365 in American Society of Animal Science, Phoenix, AZ. FASS.

17.7. de Paula, N. D., **L. O. Tedeschi**, M. F. Paulino, H. J. Fernandes, M. A. Fonseca, V. R. M. Couto, I. F. S. Maciel, and D. M. Almeida. 2012. Estimation of carcass and body fat composition using biometric measurements of grazing beef cattle. Pages 364-365 in American Society of Animal Science, Phoenix, AZ. FASS.

17.8. Fernandes, H. J., A. G. da Silva, M. F. Paulino, S. A. Lopes, **L. O. Tedeschi**, and J. A. G. Azevêdo. 2012. Body's growth curve and shape of grazing young bulls, receiving concentrate supplementation with different protein profiles. Pages 298-299 in American Society of Animal Science, Phoenix, AZ. FASS.

17.9. Fonseca, M. A., **L. O. Tedeschi**, S. C. Valadares Filho, H. J. Fernandes, N. D. de Paula, M. G. Machado, F. A. C. Villadiego, and J. M. Silva Jr. 2012. The use of biometric measures to assess body fat composition of F1 Nellore x Angus bulls and steers. Page 196 in American Society of Animal Science, Phoenix, AZ. FASS.

17.10. Galvani, D. B., A. V. Pires, I. Susin, V. N. Gouvea, A. Berndt, L. J. Chagas, J. R. R. Dórea, A. L. Abdalla, and **L. O. Tedeschi**. 2012. The energetic efficiency of growing lambs fed high-concentrate diets with different roughages. Page 136 in American Society of Animal Science, Phoenix, AZ. FASS.

17.11. Hafla, A. N., J. R. Johnson, G. E. carstens, T. D. A. Forbes, **L. O. Tedeschi**, J. C. Bailey, J. T. Walter, and J. G. Moreno. 2013. Impact of postweaning residual feed intake in heifers on efficiency of forage utilization, heart rate and physical activity of pregnant cows. Pages 135-136 in Proceedings of the Plains Nutrition Council Conference, San Antonio, TX. PNC.

17.12. Moreno, J. G., G. E. Carstens, D. Crews, Jr., **L. O. Tedeschi**, L. R. McDonald, and S. Williams. 2012. Evaluation of feed efficiency and feeding behavior traits in performance tested bulls. Page 431 in American Society of Animal Science, Phoenix, AZ. FASS.

17.13. Naumann, H. D., **L. O. Tedeschi**, J. P. Muir, B. D. Lambert, D. K. A. Silva, and M. A. Fonseca. 2012. Does total condensed tannin concentration predict rumen methane producing in vitro? Page 583 in American Society of Animal Science, Phoenix, AZ. FASS.

17.14. Prince, S., M. A. D. Bomfim, J. Angerer, and **L. O. Tedeschi**. 2012. Effect of sample temperature on fecal analysis using diode array NIR technology. Pages 1-3 in Reunião Anual da Sociedade Brasileira de Zootecnia, 49, Brasilia, DF, Brasil. SBZ.

17.15. Silva, D. K. A., **L. O. Tedeschi**, M. A. Fonseca, N. D. de Paula, K. P. Pereira, G. R. Medeiros, J. C. B. Dubeux Jr, and D. P. V. Silva. 2012. Assessment of the in vitro

fermentation pattern of native forage from the Brazilian semiarid region. Page 132 in American Society of Animal Science, Phoenix, AZ. FASS.

17.16. Whitney, T. R., J. W. Walker, W. C. Stewart, R. J. Ansley, B. D. Lambert, A. F. Cibils, C. B. Scott, J. L. Johnson, T. Bader, W. Winters, **L. O. Tedeschi**, and G. E. Carstens. 2012. Wood to feed: Diversifying income opportunities by increasing the livestock feeding value of woody plant species. Page 328 in American Society of Animal Science, Phoenix, AZ. FASS.

17.17. Wiley, L. M., **L. O. Tedeschi**, T. D. A. Forbes, F. M. Rouquette, Jr., R. D. Randel, and S. E. Dowd. 2012. A comparison of ruminal microbial populations of residual feed intake-indexed Brahman bulls under grazing conditions. Page 13 in Proceedings of the Southern section of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, v. 90. Birmingham, AL. Federation of Animal Science Societies.

18. 2013

18.1. Atzori, A. S., **L. O. Tedeschi**, and S. Armenia. 2013. Farmer education enables precision farming of dairy operations. Page 11 in Proceedings of the 31th International Conference of System Dynamics Society, Cambridge, MA. System Dynamics Society.

18.2. Hafla, A. N., J. R. Johnson, G. E. Carstens, T. D. A. Forbes, **L. O. Tedeschi**, J. C. Bailey, J. T. Walter, and J. G. Moreno. 2013. Impact of postweaning residual feed intake in heifers on efficiency of forage utilization, heart rate and physical activity of pregnant cows. Pages 135-136 in Proceedings of the Plains Nutrition Council Conference. San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/

18.3. Hagerman, A. E., S. Masih, H. D. Naumann*, J. P. Muir, and **L. O. Tedeschi**. 2013. Acacia proanthocyanidins as inhibitors of ruminal methane production: Structure-function relationships. in Proceedings of the International Chemical Ecology Conference, Victoria, Australia.

18.4. Naumann, H. D., A. E. Hagerman, B. D. Lambert, J. P. Muir, and **L. O. Tedeschi**. 2013. Does Total Condensed Tannin Concentration Predict Protein-Precipitating Ability of Condensed Tannins from Warm-Season Perennial Legumes? Page 56 in Proceedings of the 110th Annual Meeting of the Southern Association of Agricultural Scientists, Orlando, FL.

18.5. Turner, B. L., R. Gates, T. Nichols, M. Wuellner, B. H. Dunn, and **L. O. Tedeschi**. 2013. An investigation into land use changes and consequences in the Northern Great Plains using systems thinking and dynamics. Page 30 in Proceedings of the 31th International Conference of System Dynamics Society, Cambridge, MA. System Dynamics Society.

19. 2014

19.1. Fonseca, M. A., L. F. L. Cavalcanti, J. G. L. Regadas Filho, T. R. Callaway, G. E. Carstens, T. A. Wickersham, and **L. Tedeschi**. 2014. The potential benefit of corn dried distillers' grain (co)products (DDG) in the mitigation of methane production in cattle: an in vivo analysis. Page 324 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

19.2. Fonseca, M. A., W. L. Crossland, **L. O. Tedeschi**, T. R. Callaway, and G. E. Carstens. 2014. Alternatives to reduce methane production from beef cattle: A case study for

dried distillers' grain (DDG). Pages J5-J15 in Beef Cattle Short Course, College Station, TX. Texas A&M University.

19.3. Fonseca, M. A., D. K. A. Silva, H. D. Naumann, T. R. Callaway, and **L. Tedeschi**. 2014. The potential benefit of corn dried distillers' grain (co)products (DDG) in the mitigation of methane production in cattle: an in vitro analysis. Page 339 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

19.4. Jackson, K. S., G. E. Carstens, **L. O. Tedeschi**, and W. E. Pinchak. 2014. Associations between feeding behavioral patterns and intake preceding an acute spontaneous outbreak of BRD in growing bulls. Pages 153-154 in Proceedings of the Plains Nutrition Council Conference, San Antonio, TX. PNC.

19.5. McCann, J. C., L. M. Wiley, T. D. Forbes, F. M. Rouquette, and **L. O. Tedeschi**. 2014. Relationship between the rumen microbiome and residual feed intake-efficiency of Brahman bulls stocked on Bermudagrass pastures. Page 11 in Proceedings of the Southern section of the American Society of Animal Science, 92, Dallas, TX. Federation of Animal Science Societies.

19.6. Naumann, H. D., S. A. Armstrong, M. A. Fonseca, B. D. Lambert, and **L. O. Tedeschi**. 2014. Replacing alfalfa with panicled-tick clover or sericea lespedeza in a dairy diet decreases ruminal methane but not total gas production. Page 853 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

19.7. Naumann, H. D., N. M. Cherry, **L. O. Tedeschi**, J. P. Muir, and B. D. Lambert. 2014. A conceptual model of protein-precipitable polyphenols (condensed tannins) on protein binding and protein digestion in ruminants. Page 910 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

19.8. Regadas Filho, J. G. L., **L. O. Tedeschi**, A. Cannas, M. T. Rodrigues, and R. A. Vieira. 2014. The small ruminant nutrition system: Considering the ruminal fiber stratification for goats. Page 908 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

19.9. Regadas Filho, J. G. L., **L. O. Tedeschi**, M. A. Fonseca, and L. F. L. Cavalcanti. 2014. Comparison of fermentation kinetics of four feedstuffs using an in vitro gas production system and the ANKOM gas production system. Page 799 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Kansas City, KS. Federation of Animal Science Societies.

20. 2015

20.1. Angel, C. R., M. Hanigan, E. Kebreab, B. Kerr, J. P. McNamara, N. Trottier, **L. O. Tedeschi**, M. J. Vandehaar, and R. R. White. 2015. Experimental design and data-reporting needs to help support the advancement of nutrition research and nutrient requirement models. Pages 477-478 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.2. Castillo-Vargas, J. A., A. K. de Almeida, M. H. F. Machado, A. P. Souza, I. A. M. d. A. Teixeira, and **L. O. Tedeschi**. 2015. Interrelation between macrominerals in body of Saanen goats from different genders, using canonical correlation analysis. Pages 1-3 (CD format) in Proceedings of the 52th Annual Meeting of the Brazilian Society of

Animal Science, Belo Horizonte, Minas Gerais, Brazil. Sociedade Brasileira de Zootecnia (SBZ)

20.3. Crossland, W., **L. Tedeschi**, T. Callaway, M. Miller, B. Smith, and M. Cravey. 2015. Effects of rotating antibiotic and ionophore feed additives on enteric methane and volatile fatty acid production of steers consuming a high forage diet. Page 725 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.4. Crossland, W. L., **L. O. Tedeschi**, T. R. Callaway, M. Miller, W. B. Smith, and M. Cravey. 2015. Effects of rotating antibiotic and ionophore feed additives on enteric methane and volatile fatty acid production of steers consuming a high forage diet. Pages 109-110 in Proceedings of the Plains Nutrition Council Conference, San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/.

20.5. Fonseca, M. A., **L. O. Tedeschi**, T. R. Callaway, and W. L. Crossland. 2015. A comparative assessment of dried distillers' grain, ionophore, bambermycin, saponin, and condensed tannin for methane emission abatement in beef cattle. Page 126 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.6. Jackson, K. S., G. E. Carstens, **L. O. Tedeschi**, Y. Fu, A. Banerjee, W. E. Pinchak, and J. Wall. 2015. Use of statistical process control procedures to identify deviations in feeding behavior patterns preceding an acute spontaneous BRD outbreak. Page 20 in Proceedings of the Southern section of the American Society of Animal Science, Atlanta, GA. Federation of Animal Science Societies

20.7. Lancaster, P. A., G. E. Carstens, **L. O. Tedeschi**, T. P. Vining, N. DiLorenzo, and G. C. Lamb. 2015. Relationships between feed efficiency traits and indicators of energy expenditure in growing cattle. Page 835 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.8. Lancaster, P. A., and **L. O. Tedeschi**. 2015. Variability in predicted weaning weight of nursing calves using four models. Pages 870-871 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.9. Naumann, H. D., M. A. Fonseca, and **L. O. Tedeschi**. 2015. Predicting ruminal methane inhibition by condensed tannins using nonlinear exponential decay regression analysis. Page 477 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.10. Smith, W. B., F. M. M. Rouquette, J. L. Kerby, **L. O. Tedeschi**, J. L. Foster, J. P. Banta, K. C. McCuistion, and T. J. Machado. 2015. Performance of Bos indicus versus Bos taurus stocker cattle grazing 'Coastal' bermudagrass supplemented with distillers dried grains. Page 207 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.11. Smith, W. B., F. M. Rouquette, J. L. Kerby, **L. O. Tedeschi**, J. L. Foster, J. P. Banta, K. C. McCuistion, and T. J. Machado. 2015. Performance of stocker cattle grazing 'Tifton 85' bermudagrass supplemented with distiller dried grains. Page 26 in

Proceedings of the Southern section of the American Society of Animal Science, Atlanta, GA. Federation of Animal Science Societies

20.12. Smith, W. B., T. J. Machado, **L. O. Tedeschi**, J. P. Banta, J. L. Foster, K. C. McCuistion, C. R. Long, and J. Rouquette, F.M. 2015. Effects of level of DDG supplemented on pasture to performance in feedlot and carcass traits. Page 128 in Proceedings of the Plains Nutrition Council Conference, San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/.

20.13. **Tedeschi, L. O.**, and J. P. Muir. 2015. Breaking the boundaries of animal science research through internationalization programs. Page 799 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association, Orlando, FL. Federation of Animal Science Societies

20.14. **Tedeschi, L. O.**, J. P. Muir, D. G. Riley, and D. G. Fox. 2015. Future implications for animal production: A perspective on sustainable livestock intensification. Pages 1-23 (CD format) in Proceedings of the 52th Annual Meeting of the Brazilian Society of Animal Science. I. Borges, ed. Belo Horizonte, Minas Gerais, Brazil. Sociedade Brasileira de Zootecnia (SBZ). Available at: http://sbz2015.com.br/.

20.15. White, R. R., M. D. Hanigan, and **L. O. Tedeschi**. 2015. Comparing meta-regression, weighed least-square regression, and orthogonal regression for quantitative literature summary. Pages 640-641 in Proceedings of the 2015 Meeting of the Animal Science Modelling Group, 95, Orlando, FL. Agricultural Institute of Canada

21. 2016 (Professor at TAMU)

21.1. Beauchemin, K. A., G. E. Erickson, H. Tran, J. S. Caton, N. A. Cole, J. H. Eisemann, T. E. Engle, M. L. Galyean, C. R. Krehbiel, R. P. Lemenager, and **L. O. Tedeschi**. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: byproducts and feed composition. Page 483 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.2. Caton, J. S., C. R. Krehbiel, M. L. Galyean, and **L. O. Tedeschi**. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: maintenance and growth. Page 480 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.3. Cole, N. A., K. A. Beauchemin, G. E. Erickson, **L. O. Tedeschi**, and M. L. Galyean. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: environmental issues. Page 482 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.4. Crossland, W. L., **L. O. Tedeschi**, T. R. Callaway, M. D. Miller, and W. B. Smith. 2016. Effects of rotating antibiotic and ionophore feed additives on enteric methane and rumen microbial populations of steers consuming a high forage diet. Pages 655-656 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.5. de Oliveira, O. F., M. V. F. dos Santos, J. P. Muir, M. V. da Cunha, N. Cherry, **L. O. Tedeschi**, W. Crossland, and J. Dubeux, José Carlos B. 2016. Methane suppression and larval migration inhibition by *Bauhinia cheilantha* fed to sheep grazing at four forage allowances. Page??? in Proceedings of the Rangeland Congress. Saskatoon, Saskatchewan, Canada. Available at: http://2016canada.rangelandcongress.org/. Accessed on: August 14, 2016.

21.6. Eisemann, J. H., M. L. Galyean, K. A. Beauchemin, C. R. Krehbiel, and **L. O. Tedeschi**. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: protein and metabolic modifiers. Page 481 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.7. Engle, T. E., J. S. Caton, M. L. Galyean, **L. O. Tedeschi**, N. A. Cole, C. R. Krehbiel, G. E. Erickson, K. A. Beauchemin, R. P. Lemenager, and J. H. Eisemann. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: minerals, vitamins, and water. Page 482 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.8. Lemenager, R. P., J. S. Caton, M. L. Galyean, and **L. O. Tedeschi**. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: reproduction. Page 481 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.9. Miller, M. D., G. E. Carstens, J. M. Thomson, J. G. Berardinelli, M. R. Herrygers, J. White, **L. O. Tedeschi**, and P. K. Riggs. 2016. Associations between residual feed intake and metabolite profiles and feeding behavior traits in feedlot cattle. Page 711 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.10. Miller, M. D., G. E. Carstens, J. M. Thomson, **L. O. Tedeschi,** and P. K. Riggs. 2016. Association between metabolomic profiling and feeding behavior with residual feed intake for identification for potential biomarkers for RFI in feedlot cattle. Pages 113-114 in Proceedings of the Plains Nutrition Council Conference. San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/.

21.11. Smith, P. S., K. S. Jackson, W. Kayser, Y. Fu, A. Banerjee, **L. O. Tedeschi**, W. E. Pinchak, J. Wall, and G. E. Carstens. 2016. Development of predictive algorithms for preclinical detection of bovine respiratory disease based on deviations in feeding behavior patterns in cattle. Pages 121-122 in Proceedings of the Plains Nutrition Council Conference. San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/.

21.12. Smith, W. B., F. M. Rouquette, J. L. Kerby, **L. O. Tedeschi**, J. L. Foster, J. P. Banta, K. C. McCuistion, T. J. Machado, and L. A. Redmon. 2016. Performance of stocker cattle grazing 'Tifton 85' bermudagrass supplemented with dried distillers' grains on per-animal and per-are bases: A two-year summary. Page 308 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy

Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.13. Smith, W. B., J. L. Foster, M. K.C., **L. O. Tedeschi**, E. van Santen, and J. Rouquette, F.M. 2016. A novel technique for model evaluation and selection for in situ degradation parameters from cattle supplemented with varying levels of DDGS. Proceedings of the 5th Grazing Livestock Nutrition Conference; Enhancing Management, Production, and Sustainability of Grazing Ruminants in Extensive Landscapes. Park City, UT. Available at: https://www.asas.org/meetings/glnc2016/home. Accessed on: August 14, 2016.

21.14. **Tedeschi, L. O.**, M. L. Galyean, K. A. Beauchemin, J. S. Caton, N. A. Cole, J. H. Eisemann, T. E. Engle, G. E. Erickson, C. R. Krehbiel, and R. P. Lemenager. 2016. The eighth revised edition of the Nutrient Requirements of Beef Cattle: byproducts and feed composition. Pages 483-484 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.15. **Tedeschi, L. O.**, R. R. White, C. F. Nicholson, B. L. Turner, M. A. Fonseca, and M. D. Hanigan. 2016. Traditional versus structure-based model development strategies. Page 613 in Proceedings of the Joint Annual Meeting of American Society of Animal Science and American Dairy Science Association. Salt Lake City. Federation of Animal Science Societies. Available at: https://asas.org/meetings/jam-2016/abstracts. Accessed on: August 14, 2016.

21.16. Cannas, A., **L. O. Tedeschi**, G. Molle, A. S. Atzori, C. Dimauro, and M. F. Lunesu. 2016. Prediction of optimal NDF intake in sheep. Can. J. Anim. Sci. 96:628-629.

22. 2017

22.1. Crossland, W. L., A. B. Norris, T. R. Callaway, and **L. O. Tedeschi**. 2017. Effects of heat load and active dry yeast supplementation on ruminal parameters. Pages 276-277 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.2. Fonseca, M. A., W. L. Crossland, Norris, A. B., Almeida, A. K., and **L. O. Tedeschi**. 2017. The potential benefit of corn dried distillers' grain (Co) products (DDG) fed alone or in combination with ionophore and condensed tannin to mitigate methane emission in cattle. Page 282 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.3. Gorocica, M. A., and **L. O. Tedeschi**. 2017. A meta-analytical approach to evaluate the performance of cattle fed virginiamycin or monensin under feedlot conditions from seven European countries. Page 71 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.4. Gorocica, M. A., and **L. O. Tedeschi**. 2017. A meta-analytical approach to evaluate the relative effectiveness of virginiamycin for veal calf performance is maximized after ten weeks of administration. Pages 70-71 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.5. Gorocica, M. A., and **L. O. Tedeschi**. 2017. Virginiamycin increases performance and carcass weight of feedlot cattle under Mexican conditions. Page 243 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.6. Norris, A. B., W. L. Crossland, Foster, J. L., Muir, J. P., and **L. O. Tedeschi**. 2017. Differences in digestive kinetics and methane production among rhizoma peanut (Arachis glabrata Benth) cultivars. Page 138 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 95, Suppl. 4. Baltimore, MA. Federation of Animal Science Societies.

22.7. Smith, W. B., J. P. Banta, J. L. Foster, L. A. Redmon, **L. O. Tedeschi**, and Rouquette, F. M. 2017. Impact of DDGS supplementation of cattle grazing bermudagrass on the plant-animal-environment nexus. Page 62 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 95, Suppl. 1. Franklin, TN. Federation of Animal Science Societies. Available at: https://www.asas.org/docs/default-source/southern-section/2017/southern_abstract-book_final.pdf. Accessed on: June 25, 2017.

22.8. Smith, W. B., A. B. Norris, Rouquette, F. M., and **L. O. Tedeschi**. 2017. Development of a conceptual model for integration of the forage-animal interface as a foundation for decision support systems. Page 27 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 95, Suppl. 1. Franklin, TN. Federation of Animal Science Societies. Available at: https://www.asas.org/docs/default-source/southern-section/2017/southern_abstract-book_final.pdf. Accessed on: June 25, 2017.

22.9. Weiss, C. P., W. W. Gentry, C. M. Meredith, B. E. Meyer, N. A. Cole, **L. O. Tedeschi**, F. T. McCollum III, and J. S. Jennings. 2017. Effects of roughage inclusion and particle size on digestion and ruminal fermentation characteristics of beef steers. Page 107 in Proceedings of the Plains Nutrition Council Conference. San Antonio, TX. PNC. Available at: http://amarillo.tamu.edu/facultystaff/tmc/pnc/.

23. 2018

23.1. Cagle, C. M., **L. O. Tedeschi**, C. A. Runyan, T. R. Callaway, and M. D. Cravey. 2018. Evaluation of the effects of dried live yeast on rumen ph and in situ digestibility of dry matter in growing cattle. Pages 62-63 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 96, Suppl. 1. Fort Worth, TX. Federation of Animal Science Societies. Available at: http://dx.doi.org/10.1093/jas/sky027.117. 10.1093/jas/sky027.117.

23.2. Crossland, W., C. M. Cagle, F. R. B. Ribeiro, **L. O. Tedeschi**, and T. Callaway. 2018. Late-Breaking: Towards sustainable alternatives to antibiotics. 1: The evaluation of an active dried yeast in the diets of finishing steers on growth performance and carcass composition. Pages 402-403 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 96, Supp. 3, v. 96. Vancouver, BC, Canada. American Society of Animal Science. doi: 10.1093/jas/sky404.883

23.3. Crossland, W., C. M. Cagle, **L. O. Tedeschi**, and T. Callaway. 2018. Late-Breaking: Towards sustainable alternatives to antibiotics. 2: The evaluation of an active dried yeast in the diets of finishing steers on feedlot performance, rumen pH and liver health. Page 406 in Proceedings of the American Society of Animal Science (ASAS)

and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 96, Supp. 3, v. 96. Vancouver, BC, Canada. American Society of Animal Science. doi: 10.1093/jas/sky404.891

23.4. Crossland, W. L., A. B. Norris, C. M. Cagle, **L. O. Tedeschi**, G. E. Carstens, J. E. Sawyer, T. R. Callaway, and O. AlZahal. 2018. Effects of an active dry yeast supplement on ruminal pH, feeding performance, and carcass characteristics of feedlot steers. Pages 63-63 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 96, Suppl. 1, v. 96. Fort Worth, TX. Federation of Animal Science Societies. Available at: http://dx.doi.org/10.1093/jas/sky027.118. doi: 10.1093/jas/sky027.118

23.5. Norris, A. B., W. Crossland, **L. O. Tedeschi**, J. L. Foster, J. P. Muir, and W. E. Pinchak. 2018. Effect of differing rates of quebracho (*Schinopsis balansae*) extract provided in a limit-fed high roughage total mixed ration upon digestibility and nitrogen balance. Pages 206–207 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 96, Supp. 3, v. 96. Vancouver, BC, Canada. American Society of Animal Science. doi: 10.1093/jas/sky404.448

23.6. Norris, A. B., **L. O. Tedeschi**, K. D. Casey, J. C. B. Dubeux, Jr., J. L. Foster, J. P. Muir, and W. E. Pinchak. 2018. Quebracho (*Schinopsis balansae*) extract in beef cattle fed high-roughage total mixed ration affects manure gas emissions. Page 589 in Proceedings of the 10th International Symposium on the Nutrition of Herbivores. Clermont-Ferrand, France. Available at: https://www.cambridge.org/core/journals/advances-in-animal-biosciences/article/proceedings-of-the-10th-international-symposium-on-the-nutrition-of-herbivores/534EC354FE5AB94AA77905505CF6BFB4

23.7. Norris, A. B., **L. O. Tedeschi**, K. D. Casey, J. C. B. Dubeux Jr, J. L. Foster, J. P. Muir, and W. E. Pinchak. 2018. Effects of feeding different levels of quebracho (Schinopsis balansae) extract in a high-roughage total mixed ration on manure gas emissions. Pages 19-20 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 96, Suppl. 1, v. 96. Fort Worth, TX. Federation of Animal Science Societies. Accessed on: August 6, 2018. doi: 10.1093/jas/sky027.037

23.8. **Tedeschi, L. O.** 2018. The evolution of mathematical models for animal nutrition: what to expect next? Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 96. Vancouver, BC, Canada. American Society of Animal Science. Available at: https://animalnutrition.org/workshops-symposia

23.9. **Tedeschi, L. O.**, A. Cannas, M. Fonseca, and G. Molle. 2018. Platform speaker: Assessment of pasture supplementation needs with modern computer models. Pages 207-208 in Proceedings of the American Society of Animal Science (ASAS) and Canadian Society of Animal Science (CSAS) Annual Meeting. J. Anim. Sci. Vol. 96, Supp. 3, v. 96. Vancouver, BC, Canada. American Society of Animal Science. doi: 10.1093/jas/sky404.450

23.10. **Tedeschi, L. O.**, H. Menendez, and A. S. Atzori. 2018. The central role of modeling for precision farming applications. Proceedings of the International Dairy Federation (IDF) World Dairy Summit. Daejeon, South Korea. International Dairy Federation. Available at: https://www.fil-idf.org/event/idf-world-dairy-summit-2018/

24. 2019

24.1. Adams, J., A. B. Norris, and **L. O. Tedeschi**. 2019. Comparison of in situ techniques to evaluate the recovery of indigestible components and the accuracy of digestibility estimates. Pages 254-254 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.517. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.517

24.2. Brochine, L., G. M. Oliveira, M. S. Pascotto, M. M. Silva, L. E. P. Villa, B. R. Teofilo, S. B. Gallo, and **L. O. Tedeschi**. 2019. Performance of lambs born from ewes fed with different energy levels. Pages 468-469 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.923. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.923

24.3. Dias Batista, L. F., C. Cagle, A. Norris, M. Ferro, W. Crossland, and **L. O. Tedeschi**. 2019. Gas production dynamics of salts of volatile organic acids incubated with Brachiaria brizantha cv. Marandu. Pages 66-66 in Proceedings of the American Society of Animal Science (ASAS) J. Anim. Sci. Vol. 97, Suppl. 1, v. 97(Supplement_1). Austin, TX. Available at: https://doi.org/10.1093/jas/skz053.148. Accessed on: 10/3/2019. doi: 10.1093/jas/skz053.148

24.4. Dias Batista, L. F., A. B. Norris, M. Rivera, G. D' Souza, J. Adams, and **L. O. Tedeschi**. 2019. Effect of quebracho (*Schinopsis balansae*) extract inclusion in a high roughage diet upon in situ digestion. Pages 399-400 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.796. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.796

24.5. Gallo, S. B., S. Honigmann, L. Brochine, G. M. de Oliveira, and **L. O. Tedeschi**. 2019. Effects of high-energy diet on viscera and progeny carcass yield in sheep. Pages 71-71 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 97, Suppl. 1, v. 97(Supplement_1). Oklahoma City, OK. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz053.160. Accessed on: 8/2/2019. doi: 10.1093/jas/skz053.160

24.6. Jennings, J. S., C. L. Lockard, and **L. O. Tedeschi**. 2019. Determining the appropriate inclusion of physically effective fiber for finishing beef cattle diets. Page 317 in Proceedings of the 9th Workshop on Modelling Nutrient Digestion and Utilization in Farm Animals (MODNUT). Adv. Anim. Biosci., v. 10(2). I. A. M. A. Teixeira, B. Biagioli, L. Hauschild and N. K. Sakomura, eds. Ubatuba, SP, Brazil. Cambridge University Press. Available at: https://www.cambridge.org/core/article/proceedings-of-the-9th-workshop-on-modelling-nutrient-digestion-and-utilization-in-farm-animals-modnut/4E046D128510CA654ADDA96170E0C84D

24.7. Johnson, J. R., G. E. Carstens, I. Parsons, and **L. O. Tedeschi**. 2019. Application of partial least squares regression to predict feed efficiency and intake using feeding behavior patterns in growing steers and heifers. Pages 237-238 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at:

https://doi.org/10.1093/jas/skz258.482. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.482

24.8. Johnson, J. R., I. L. Parsons, G. E. Carstens, **L. O. Tedeschi**, C. Heuer, and N. Deeb. 2019. Characterization of feeding-behavior patterns and application of chemometrics to predict residual feed intake based on feeding-behavior traits in growing Holstein heifers. Pages 23-23 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 97, Suppl. 1, v. 97(Supplement_1). Oklahoma City, OK. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz053.051. Accessed on: 8/2/2019. doi: 10.1093/jas/skz053.051

24.9. Johnson, J. R., I. L. Parsons, G. E. Carstens, **L. O. Tedeschi**, C. Heuer, and N. Deeb. 2019. Characterization of feeding-behavior patterns and application of chemometrics to predict residual feed intake based on feeding-behavior traits in growing Holstein heifers. Pages 61-62 in Proceedings of the American Society of Animal Science (ASAS) Southern Section. J. Anim. Sci. Vol. 97, Suppl. 1, v. 97(Supplement_1). Oklahoma City, OK. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz053.138. Accessed on: 8/2/2019. doi: 10.1093/jas/skz053.138

24.10. Menendez III, H. M., B. L. Turner, and **L. O. Tedeschi**. 2019. A modeling framework to assess the impact of the texas beef cattle water footprint on livestock sustainability. Pages 147-147 in Proceedings of the American Society of Animal Science (ASAS) J. Anim. Sci. Vol. 97, Suppl. 1, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.301. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.301

24.11. Norris, A. B., W. L. Crossland, **L. O. Tedeschi**, J. L. Foster, J. P. Muir, and W. Pinchak. 2019. Influence of quebracho (*Schinopsis balansae*) tannin extract fed at differing rates in a high-roughage diet on energy partitioning in beef steers. Pages 391-392 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.780. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.780

24.12. Norris, A. B., **L. O. Tedeschi**, J. L. Foster, J. P. Muir, and B. E. Pinchak. 2019. Effects of feeding different levels of quebracho (*Schinopsis balansae*) extract in a high-roughage total mixed ration on seasonal manure gas emissions. Pages 93-94 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.193. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.193

24.13. Rivera, M., J. Adams, and **L. O. Tedeschi**. 2019. Nutritional management for tropical-subtropical-adapted cattle receiving high-concentrate diets. Pages 33-34 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.066. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.066

24.14. Santos, F. F., L. Brochine, V. B. Junior, M. L. R. Coelho, A. H. Gameiro, J. C. Balieiro, S. B. Gallo, and **L. O. Tedeschi**. 2019. Growth and lactating performance of ewes fed with different energy levels. Pages 467-468 in Proceedings of the American Society

of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.921. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.921

24.15. Santos, F. F., M. C. Oliveira, F. M. Moreira, L. P. A. Buzzato, T. S. Santos, A. H. Gameiro, S. B. Gallo, and **L. O. Tedeschi**. 2019. The impact of energy nutrition planes of ewes on the productive and reproductive performance of their offspring. Pages 468-468 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.922. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.922

24.16. **Tedeschi, L. O. 2019**. Can artificial intelligence improve the prediction adequacy of mathematical modeling in ruminant nutrition? Page 289 in Proceedings of the 9th Workshop on Modelling Nutrient Digestion and Utilization in Farm Animals (MODNUT). Adv. Anim. Biosci., v. 10(2). I. A. M. A. Teixeira, B. Biagioli, L. Hauschild and N. K. Sakomura, eds. Ubatuba, SP. Cambridge University Press. Available at: https://www.cambridge.org/core/article/proceedings-of-the-9th-workshop-on-modelling-nutrient-digestion-and-utilization-in-farm-animals-modnut/4E046D128510CA654ADDA96170E0C84D

24.17. **Tedeschi, L. O.**, and H. M. Menendez, III. 2019. Assessing differences in livestock sustainability and efficiency in arid, temperate and subtropical environments using a dynamic beef water footprint model. Page 356 in Proceedings of the 9th Workshop on Modelling Nutrient Digestion and Utilization in Farm Animals (MODNUT). Adv. Anim. Biosci., v. 10(2). I. A. M. A. Teixeira, B. Biagioli, L. Hauschild and N. K. Sakomura, eds. Ubatuba, SP, Brazil. Cambridge University Press. Available at: https://www.cambridge.org/core/article/proceedings-of-the-9th-workshop-on-modelling-nutrient-digestion-and-utilization-in-farm-animals-modnut/4E046D128510CA654ADDA96170E0C84D

24.18. **Tedeschi, L. O.** 2019. Assessing the predictive adequacy of simple and complex mathematical models. Pages 24-24 in Proceedings of the American Society of Animal Science (ASAS). J. Anim. Sci. Vol. 97, Suppl. 3, v. 97(Supplement_3). Austin, TX. Federation of Animal Science Societies. Available at: https://doi.org/10.1093/jas/skz258.046. Accessed on: 9/21/2020. doi: 10.1093/jas/skz258.046

24.19. Tinal-Ortiz, S., L. M. Vargas-Villamil, J. M. Zaldívar-Cruz, O. Hernández-Mendo, L. Avendaño-Reyes, U. Macías-Cruz, A. Chay-Canul, and **L. O. Tedeschi**. 2019. Initial evaluation of the use of the inverse problem in the study of the partition of energy in pregnant sheep. Page 297 in Proceedings of the 9th Workshop on Modelling Nutrient Digestion and Utilization in Farm Animals (MODNUT). Adv. Anim. Biosci., v. 10(2). I. A. M. A. Teixeira, B. Biagioli, L. Hauschild and N. K. Sakomura, eds. Ubatuba, SP, Brazil. Cambridge University Press. Available at: https://www.cambridge.org/core/article/proceedings-of-the-9th-workshop-on-modelling-nutrient-digestion-and-utilization-in-farm-animals-modnut/4E046D128510CA654ADDA96170E0C84D

24.20. Vargas-Villamil, L. M., **L. O. Tedeschi**, B. Godínez Juárez, S. Medina-Peralta, F. Izquierdo-Reyes, J. Navarro-Alberto, and R. González-Garduño. 2019. A novel multi-inverse approach for a holistic understanding of applied animal science systems. Page 298 in Proceedings of the 9th Workshop on Modelling Nutrient Digestion and

Utilization in Farm Animals (MODNUT). Adv. Anim. Biosci., v. 10(2). I. A. M. A. Teixeira, B. Biagioli, L. Hauschild and N. K. Sakomura, eds. Ubatuba, SP, Brazil. Cambridge University Press. Available at: https://www.cambridge.org/core/article/proceedings-of-the-9th-workshop-on-modelling-nutrient-digestion-and-utilization-in-farm-animals-modnut/4E046D128510CA654ADDA96170E0C84D

25. 2020

25.1. Adams, J., A. B. Norris, M. E. Rivera, L. F. D. Batista, and **L. O. Tedeschi**. 2020. The suitability of autoclave and pressure cooker washing methods in comparison to ANKOM200 to determine neutral detergent fiber using different feedstuffs and washing solutions. J. Anim. Sci. 98 (Supplement_2):24-24. doi: 10.1093/jas/skz397.054

25.2. Batalha, C. D. A., F. L. d. Araújo, R. H. Branco, **L. O. Tedeschi**, and S. F. M. Bonilha. 2020. Performance and energy requirements for Nellore bulls divergent in residual feed intake. Page 370 in Proceedings of the 71st Annual Meeting of the European Federation of Animal Science. Virtual Meeting. European Federation of Animal Science (EAX, EVT, FEZ, EAAP, EUROPA).

25.3. Batalha, C. D. A., F. L. De Araújo, R. H. Branco, **L. O. Tedeschi**, and S. F. Bonilha. 2020. Calculating energy efficiency use for Nellore bulls divergent in residual feed intake. J. Anim. Sci. 98 (Supplement_4):393-394. doi: 10.1093/jas/skaa278.692

25.4. D'Souza, G. M., A. B. Norris, and **L. O. Tedeschi**. 2020. Evaluation of methane concentration sampling methods of gas produced from in vitro fermentation. J. Anim. Sci. 98 (Supplement_2):54-55. doi: 10.1093/jas/skz397.125

25.5. D'Souza, G. M., A. Norris, L. D. Batista, and **L. O. Tedeschi**. 2020. Effect of live yeast on greenhouse gas emissions and energy partitioning of growing steers in heat-stress conditions. J. Anim. Sci. 98 (Supplement_4):407-407. doi: 10.1093/jas/skaa278.713

25.6. Dias Batista, L. F., M. E. Rivera, A. B. Norris, J. Adams, R. Cracco, M. Jackson, and **L. O. Tedeschi**. 2020. Effect of quebracho (*Schinopsis balansae*) extract inclusion in a high roughage diet upon in vitro gas production. J. Anim. Sci. 98 (Supplement_2):53-54. doi: 10.1093/jas/skz397.122

25.7. Gorocica, M., Iglesias, M. A., R. R. Gonzalez, and **L. O. Tedeschi**. 2020. Effects of virginiamycin on milk yield and ruminal pH of lactating dairy Holsteins cows. Page 284 in Proceedings of the American Dairy Science Association, v. 103(Supplement 1). Online. ADSA.

25.8. McKay, B. J., J. F. Penry, N. Chrystal, M. Gorocica, and **L. O. Tedeschi**. 2020. The use of OmniGen-AF in New Zealand dairy herds: An observational study. Page 284 in Proceedings of the American Dairy Science Association, v. 103(Supplement 1). Online. ADSA.

25.9. Menendez III, H. M., and **L. O. Tedeschi**. 2020. Impact of regionalized forage quality and quantity and feed grain water use on the daily Texas beef cattle water footprint and supply chain efficiency. J. Anim. Sci. 98 (Supplement_2):30-30. doi: 10.1093/jas/skz397.068

25.10. Muñoz-Tamayo, R., M. Hess, S. A. Huws, B. L. Nielsen, E. Norberg, M. Pastell, **L. O. Tedeschi**, P. Trevisi, and M. Vayssier-Taussat. 2020. Peer community in animal science: a free publication model for transparent and open science. Page 568 in Proceedings of the 71st Annual Meeting of the European Federation of Animal

Science. Virtual Meeting. European Federation of Animal Science (EAX, EVT, FEZ, EAAP, EUROPA).

25.11. Rivera, M. E., A. B. Norris, and **L. O. Tedeschi**. 2020. The effect of sample handling methodology on ruminal redox potential measured in vivo and in vitro. J. Anim. Sci. 98 (Supplement_2):54-54. doi: 10.1093/jas/skz397.124

25.12. **Tedeschi, L. O**. 2020. The need for hybrid neural network models in precision livestock farming systems. Page 111 in Proceedings of the 71st Annual Meeting of the European Federation of Animal Science. Virtual Meeting. European Federation of Animal Science (EAX, EVT, FEZ, EAAP, EUROPA).

25.13. **Tedeschi, L. O.** 2020. Awardee Talk: How retained energy and protein affects the determination of energy and protein requirements for growth. J. Anim. Sci. 98 (Supplement_4):84-85. doi: 10.1093/jas/skaa278.154

26. 2021

26.1. Buessing, Z. T., M. E. Davis, **L. O. Tedeschi**, B. J. White, and P. A. Lancaster. 2021. PSI-1 Assessment of Nursing Calf Feed Intake Equations in Predicting Calf Feed Intake. J. Anim. Sci. 99 (Supplement_1):225-225. doi: 10.1093/jas/skab054.369

26.2. D'Souza, G. M., K. Harvey, L. F. Dias Batista, R. F. Cooke, and **L. O. Tedeschi**. 2021. PSIV-1 A comparison of chromatography methods to estimate ruminal VFA concentrations. J. Anim. Sci. 99 (Supplement_3):295-295. doi: 10.1093/jas/skab235.542

26.3. D'Souza, G. M., A. B. Norris, L. F. D. Batista, J. Gill, T. G. G. Nagaraja, and **L. O. Tedeschi**. 2021. PSX-B-4 Effect of live yeast on the ruminal fermentation characteristics of growing steers in heat-stress conditions. J. Anim. Sci. 99 (Supplement_3):459-459. doi: 10.1093/jas/skab235.814

26.4. Dias Batista, L. F., A. B. Norris, J. Adams, and **L. O. Tedeschi**. 2021. 286 Effects of supplementation of quebracho extract supplementation on ruminal pH of growing beef steers. J. Anim. Sci. 99 (Supplement_3):158-159. doi: 10.1093/jas/skab235.291

26.5. Lancaster, P. A., M. Davis, **L. O. Tedeschi**, J. Rutledge, and L. Cundiff. 2021. 71 Evaluation of the CVDS Beef Cow Model to Estimate Biological Efficiency in Mature Cows. J. Anim. Sci. 99 (Supplement_1):119-119. doi: 10.1093/jas/skab054.197

26.6. Rivera, M. E., L. F. D. Batista, A. B. Norris, G. M. D'Souza, and **L. O. Tedeschi**. 2021. 288 Inclusion Effects of Quebracho (Schinopsis Balansaie) Extract and Active Dry Yeast (Saccharomyces Cerevisiae) in Beef Cattle Limit-fed a Grower Ration. J. Anim. Sci. 99 (Supplement_3):157-157. doi: 10.1093/jas/skab235.289

26.7. Seo, S., K. Kang, S. Jeon, and **L. O. Tedeschi**. 2021. 543 Late-Breaking: Development of a Model to Predict Dietary Metabolizable Energy from Digestible Energy in Beef Cattle. J. Anim. Sci. 99 (Supplement_3):152-153. doi: 10.1093/jas/skab235.280

Books and Book Chapters

1. 2000

1.1. Fox, D. G., T. P. Tylutki, M. E. Van Amburgh, L. E. Chase, A. N. Pell, T. R. Overton, **L. O. Tedeschi**, C. N. Rasmussen, and V. M. Durbal. 2000. The Net Carbohydrate and Protein System for evaluating herd nutrition and nutrient excretion: Model documentation. Mimeo No. 213. Animal Sci. Dept., Cornell University, Ithaca, NY.

2. 2003

2.1. Barioni, L. G., **L. O. Tedeschi**, G. B. Martha Jr., D. Pazzanese, and R. F. Veloso. 2003. Diet Formulation with Minimum Dry Matter Cost for Beef Bovines Using Electronic Spreadsheet. Comunicado Técnico. No. 98. EMBRAPA, Planaltina, DF.

2.2. Fox, D. G., T. P. Tylutki, **L. O. Tedeschi**, M. E. Van Amburgh, L. E. Chase, A. N. Pell, T. R. Overton, and J. B. Russell. 2003. The Net Carbohydrate and Protein System for evaluating herd nutrition and nutrient excretion: Model documentation. Mimeo No. 213. Animal Science Dept., Cornell University, Ithaca, NY.

2.3. Fox, D. G. and **L. O. Tedeschi**. 2003. Predicting dietary amino acid adequacy for ruminants. In: D'Mello, J.P.F., (Ed) Amino Acids in Animal Nutrition. CABI Publishing, Cambridge, MA, pp 389-410.

2.4. **Tedeschi, L. O.**, D. G. Fox, and M. J. Baker. 2003. The Cornell Value Discovery System Model: Model Documentation. Cornell University, Ithaca, NY. 61p.

3. 2004

3.1. Fox, D. G., **L. O. Tedeschi**, and M. J. Baker. 2004. Identifying differences in efficiency in beef cattle. Mimeo No. 225. Animal Science Dept., Cornell University, Ithaca, NY.

4. 2006 (Assistant Professor at TAMU)

4.1. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and D. G. Fox. 2006. Prediction of energy requirement for growing sheep with the Cornell net carbohydrate and protein system. In: Dijkstra, J. (Ed) Modeling Nutrient Utilization in Farm Animals. CABI Publishing, Cambridge, MA, 99-113

4.2. **Tedeschi, L. O.**, D. G. Fox, M. J. Baker, and K. Long. 2006. A mechanistic nutrition model to evaluate beef cow efficiency. In: Dijkstra, J. (Ed) Modeling Nutrient Utilization in Farm Animals. CABI Publishing, Cambridge, MA, pp. 84-98

5. 2007

5.1. Boston, R. C., P. A. Wilkins, and L. O. Tedeschi. 2007. Identifiability and Accuracy: Two critical problems associated with the application of models in nutrition and the health sciences. Pages 161-193 in Mathematical Modeling for Nutrition and Health Sciences. M. Hanigan, ed. Roanoke, VA.

6. 2010

6.1. Cannas, A., **L. O. Tedeschi**, A. S. Atzori, and D. G. Fox. 2010. The development and evaluation of the Small Ruminant Nutrition System. Pages 263-272 in Modelling Nutrient Digestion and Utilization in Farm Animals. vol. 7th. D. Sauvant, J. Van Milgen, P. Faverdin and N. Friggens, eds. University of Wageningen Press, Paris, France

6.2. Marcondes, M. I., M. L. Chizzotti, S. C. Valadares Filho, and **L. O. Tedeschi**. 2010. Prediction of Nellore empty body composition using indirect measurements. Pages 315-323 in Modelling Nutrient Digestion and Utilization in Farm Animals. vol. 7th. D. Sauvant, J. Van Milgen, P. Faverdin and N. Friggens, eds. University of Wageningen Press, Paris, France

6.3. Marcondes, M. I., P. V. R. Paulino, S. C. Valadares Filho, M. P. Gionbelli, L. F. Costa e Silva, and **L. O. Tedeschi**. 2010. Prediction of body and carcass chemical composition of purebred and crossbred Nellore cattle. Pages 61-79 in Nutrient Requirements of Zebu Beef Cattle. S. C. Valadares Filho, M. I. Marcondes, M. L. Chizzotti and P. V. R. Paulino, eds. Suprema Gráfica e Editora Ltda., Viçosa, MG, Brazil

6.4. Marcondes, M. I., **L. O. Tedeschi**, S. C. Valadares Filho, M. P. Gionbelli, and M. L. Chizzotti. 2010. Prediction of partial efficiency of use of metabolizable energy to net energy for gain and maintenance. Pages 543-544 in Proceedings of the 3rd

International Symposium on Energy and Protein Metabolism and Nutrition. G. M. Crovetto, ed. Wageningen Academic Publishers, Parma, Italy

6.5. **Tedeschi, L. O.**, and R. C. Boston. 2010. Identifiability and accuracy: a closer look at contemporary contributions and changes in these vital areas of mathematical modelling. Pages 91-99 in Modelling Nutrient Digestion and Utilization in Farm Animals. vol. 7th. D. Sauvant, J. Van Milgen, P. Faverdin and N. Friggens, eds. University of Wageningen Press, Paris, France

6.6. **Tedeschi, L. O.**, D. G. Fox, G. E. Carstens, and C. L. Ferrell. 2010. The partial efficiency of use of metabolizable energy to net energy for growth in ruminants. Pages 519-529 in Proceedings of the 3rd International Symposium on Energy and Protein Metabolism and Nutrition. G. M. Crovetto, ed. Wageningen Academic Publishers, Parma, Italy

6.7. **Tedeschi, L. O.**, D. G. Fox, and D. K. Roseler. 2010. An interactive, mechanistic nutrition model to determine energy efficiency of lactating dairy cows. Pages 252-262 in Modelling Nutrient Digestion and Utilization in Farm Animals. vol. 7. D. Sauvant, J. Van Milgen, P. Faverdin and N. Friggens, eds. University of Wageningen Press, Paris, France

7. 2011 (Associate Professor at TAMU)

7.1. Tedeschi, L. O., C. Clement, and K. E. Dooley. 2011. Breaking the boundaries across nations through international partnership programs: Lessons from a student exchange consortia program. Pages 131-136 in Developing Strategic International Partnerships: Models for Initiating and Sustaining Innovative Institutional Linkages. S. B. Sutton and D. Obst, ed. Institute of International Education, New York, NY.

8. 2013

8.1. Cavalcanti, L. F. L., I. Borges, F. A. Souza, G. L. Macedo Jr., and **L. O. Tedeschi**. 2013. The development of the gravid uterus of Santa Inês ewes and ewe lambs under two nutritional planes. Pages 113-114 in Proceedings of the 4th International Symposium on Energy and Protein Metabolism and Nutrition. J. W. Oltjen, E. Kebreab and H. Lapierre, eds. Wageningen Academic Publishers, Sacramento, CA

8.2. Cavalcanti, L. F. L., M. A. Fonseca, J. G. L. Regadas Filho, and **L. O. Tedeschi**. 2013. A continuous approach to assess methane production rate in ruminants using respiration chambers. Pages 249-250 in Proceedings of the 4th International Symposium on Energy and Protein Metabolism and Nutrition. J. W. Oltjen, E. Kebreab and H. Lapierre, eds. Wageningen Academic Publishers, Sacramento, CA

8.3. Chay-Canul, A. J., J. C. Ku-Vera, A. J. Ayala-Burgos, J. G. Magaña-Monforte, **L. O. Tedeschi**, and M. L. Chizzotti. 2013. Effect of metabolizable energy intake on energy partitioning into muscle and fat in Pelibuey ewes. Pages 105-106 in Proceedings of the 4th International Symposium on Energy and Protein Metabolism and Nutrition. J. W. Oltjen, E. Kebreab and H. Lapierre, eds. Wageningen Academic Publishers, Sacramento, CA

8.4. Naumann, H. D., **L. O. Tedeschi**, A. E. Hageman, B. D. Lambert, and J. P. Muir. 2013. Methane emission and protein precipitation ability of condensed tannin from warm-season perennial legumes. Pages 491-491 in Proceedings of the 4th International Symposium on Energy and Protein Metabolism and Nutrition. J. W. Oltjen, E. Kebreab and H. Lapierre, eds. Wageningen Academic Publishers, Sacramento, CA

9. 2014

9.1. **Tedeschi, L. O.**, M. Herrero, and P. K. Thornton. 2014. An Overview of Dairy Cattle Models for Predicting Milk Production: Their Evolution, Evaluation, and Application for the Agricultural Model Intercomparison and Improvement Project (AgMIP) for Livestock. CCAFS Working Paper. No. 94. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. 52p. Available at: https://cgspace.cgiar.org/handle/10568/56628. Accessed on February 6, 2015.

10. 2015

10.1. Crossland, W. L., T. R. Callaway, and **L. O. Tedeschi**. 2015. Shiga toxin-producing E. coli. and ruminant diets: A match made in heaven? Pages 185-213 in Food Safety; Emerging Issues, Technologies, and Systems. S. C. Ricke, J. R. Donaldson and C. A. Phillips, eds. Elsevier, New York, NY

10.2. Lana, R. d. P., R. H. d. T. e. B. de Goes, A. B. Mâncio, D. M. da Fonseca, L. d. M. Moreira, and **L. O. Tedeschi**. 2015. Uso do modelo de Lineweaver-Burk de transformação de dados para explicar a resposta animal e vegetal em função do nível variável de nutrientes. Pages 28-38 in Respostas de Animais e Plantas aos Nutrientes. R. d. P. Lana, ed. Universidade Federal de Viçosa, Viçosa, MG, Brasil

10.3. **Tedeschi, L. O.**, and D. G. Fox. 2015. Energy and nutrient requirements of grazing and confined growing beef cattle: Refining the assessment of energy expenditure for grazing animals. Pages 21-56 in Proceedings of the X NESPRO Meeting & II International Symposium on Beef Cattle Production Systems. G. R. Pereira, T. E. de Oliveira and J. O. J. Barcellos, eds. Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil

11. 2016 (Professor at TAMU)

11.1. Kebreab, E., **L. Tedeschi**, J. Dijkstra, J. L. Ellis, A. Bannink, and J. France. 2016. Modeling Greenhouse Gas Emissions from Enteric Fermentation. Synthesis and Modeling of Greenhouse Gas Emissions and Carbon Storage in Agricultural and Forest Systems to Guide Mitigation and Adaptation. S. Del Grosso, L. Ahuja and W. Parton, eds. Advances in Agricultural Systems Modeling. vol. 6. American Society of Agronomy, Inc., Crop Science Society of America, Inc., and Soil Science Society of America, Inc., Madison, WI. doi: 10.2134/advagricsystmodel6.2013.0006

11.2. National Academies of Sciences, Engineering, and Medicine. 2016. Nutrient Requirements of Beef Cattle. (8th ed.). Animal Nutrition Series. National Academy Press, Washington, DC. doi: 10.17226/19014

11.3. Smith, W. B., T. R. Callaway, **L. O. Tedeschi**, F. M. Rouquette, T. Sheridan, and J. Adamski. 2016. Prebiotic and probiotic approaches to improving food safety on the farm and their implications on human health. Pages 1-18 in Probiotics and Prebiotics in Human Nutrition and Health. V. Rao and L. G. Rao, eds. InTech,

11.4. **Tedeschi, L. O.**, and D. G. Fox. 2016. The Ruminant Nutrition System: An Applied Model for Predicting Nutrient Requirements and Feed Utilization in Ruminants. XanEdu, Acton, MA.

12. 2018

12.1. **Tedeschi, L. O.**, and D. G. Fox. 2018. The Ruminant Nutrition System: An Applied Model for Predicting Nutrient Requirements and Feed Utilization in Ruminants. (2nd ed.). XanEdu, Acton, MA.

13. 2019

13.1. Alhadas, H. M., R. V. Reis, G. A. P. Souza, B. C. Lage, B. C. Silva, M. V. C. Pacheco, F. A. S. Silva, L. A. Godoi, P. Prucetti, J. T. Silva, D. R. Andrade, **L. O. Tedeschi**, F. F.

Silva, and S. C. Valadares Filho. 2019. Chemical and physical composition of different rib cuts in Nellore cattle. Pages 431-432 in Proceedings of the 6th International Symposium on Energy and Protein Metabolism and Nutrition. M. L. Chizzotti, ed. Belo Horizonte, MG, Brazil. Wageningen Academic Publishers.

13.2. **Tedeschi, L. O.**, and G. E. Carstens. 2019. Limitations of the comparative slaughter technique in determining protein requirements for growth. Pages 457-458 in Proceedings of the 6th International Symposium on Energy and Protein Metabolism and Nutrition. M. L. Chizzotti, ed. Belo Horizonte, MG, Brazil. Wageningen Academic Publishers.

14. 2020

14.1. **Tedeschi, L. O.**, and D. G. Fox. 2020. The Ruminant Nutrition System: Volume I - An Applied Model for Predicting Nutrient Requirements and Feed Utilization in Ruminants. (3rd ed.). XanEdu, Ann Arbor, MI.

14.2. **Tedeschi, L. O.**, and D. G. Fox. 2020. The Ruminant Nutrition System: Volume II - Tables of Equations and Coding. XanEdu, Ann Arbor, MI.

14.3. **Tedeschi, L. O.**, and H. M. Menendez, III. 2020. Mathematical modeling in animal production. Pages 431-453 in Animal Agriculture: Sustainability, Challenges and Innovations. F. W. Bazer, G. C. Lamb and G. Wu, eds. Elsevier. doi: 10.1016/B978-0-12-817052-6.00025-2

14.4. **Tedeschi, L. O.**, and T. G. Nagaraja. 2020. Rumen Health Compendium. Department of Animal Science, Texas A&M University, College Station, TX.

14.5. **Tedeschi, L. O.**, and T. G. Nagaraja. 2020. Rumen modifiers. Pages 35-46 in Rumen Health Compendium. L. O. Tedeschi and T. G. Nagaraja, eds. Department of Animal Science, Texas A&M University, College Station, TX

15. 2021

15.1. **Tedeschi, L. O.**, and T. G. Nagaraja. 2021. Compêndio da Saúde do Rúmen. XanEdu, Ann Arbor, MI

15.2. **Tedeschi, L. O.**, and T. G. Nagaraja. 2021. Compendio de la Salud del Rumen. XanEdu, Ann Arbor, MI

15.3. **Tedeschi, L. O.**, and T. G. Nagaraja. 2021. Modificadores del rumen. Pages 37-50 in Compendio de la Salud del Rumen. L. O. Tedeschi and T. G. Nagaraja, eds. XanEdu, Ann Arbor, MI

15.4. **Tedeschi, L. O.**, and T. G. Nagaraja. 2021. Modificadores ruminais. Pages 35-47 in Compêndio da Saúde do Rúmen. L. O. Tedeschi and T. G. Nagaraja, eds. XanEdu, Ann Arbor, MI

Experiment Station

1. 2004

1.1. **Tedeschi, L. O.**, D. G. Fox, and M. J. Baker. 2004. Unveiling the production efficiency of the beef cow: A systematic approach using nutrition models. Animal Science Mimeograph Series. No. 224. NY Beef Cattle Winter Management Meeting. Cornell Cooperative Extension, Corning, NY. 12 p.

2. 2006 (Assistant Professor at TAMU)

2.1. Bourg, B. M., **L. O. Tedeschi**, G. E. Carstens, P. A. Lancaster, and D. G. Fox. 2006. Meta-analysis of the Cattle Value Discovery System predictions of feed intake and efficiency in growing and finishing cattle. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 43-49 p.

2.2. Chizzotti, F. H. M., O. G. Pereira, **L. O. Tedeschi**, S. C. Valadares Filho, M. L. Chizzotti*, L. M. Moura, I. C. S. Belo, and D. H. Pereira. 2006. Evaluation of intake, digestibility, and performance of crossbred steers fed diets containing high levels of urea. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 71-74 p.

2.3. Chizzotti, M. L., **L. O. Tedeschi**, S. C. Valadares Filho, F. H. M. Chizzotti*, G. E. Carstens, P. M. Amaral, P. D. B. Benedeti, T. I. Rodrigues, D. M. Oliveira, M. A. Fonseca, L. C. Silva, M. I. Marcondes, and T. R. Santos. 2006. Energy and protein requirements for maintenance and growth of F1 Nellore x Red Angus bulls, steers, and heifers. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 75-79 p.

2.4. Lancaster, P. A., G. E. Carstens, **L. O. Tedeschi**, E. G. Brown, B. M. Bourg*, T. D. A. Forbes, R. D. Randel, T. H. Welsh Jr., F. M. Rouquette, and D. G. Fox. 2006. Meta-analysis of feed efficiency and carcass composition traits in growing and finishing cattle. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 87-90 p.

2.5. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. H. M. R. Fernandes. 2006. Evaluation of feed efficiency traits and their relationships with carcass ultrasound and feeding behavior traits in Brahman heifers. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 91-94 p.

2.6. **Tedeschi, L. O.** and D. G. Fox. 2006. Using mathematical nutrition models to improve beef cattle efficiency. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 95-103 p.

2.7. Vasconcelos, J. T. and **L. O. Tedeschi**. 2006. Using decision support systems to evaluate the effects of changing diet crude protein on animal performance and nitrogen excretion. 2006 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 105-107 p.

3. 2007

3.1. Bonilha, S. F. M., **L. O. Tedeschi**, I. U. Packer, A. G. Razook, G. F. Alleoni, R. F. Nardon, and F. D. Resende. 2007. Meta-analysis of the carcass characteristics of Bos indicus and tropical adapted Bos taurus breeds. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 17-22 p.

3.2. Bourg, B. M., **L. O. Tedeschi**, G. E. Carstens, E. G. Brown, and D. G. Fox. 2007. Evaluation of CVDS model to estimate total feed fed to Santa Gertrudis steers and heifers based on performance and diet composition. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 69-72 p.

3.3. da Silva, G. S., A. D. Aguiar, J. Pavan Neto, M. L. Chizzotti*, R. C. Anderson, and **L. O. Tedeschi**. 2007. Evaluating factors that impact the dynamics of in vitro fermentation using gas production technique. 1. Forage particle size. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 89-92 p.

3.4. Pavan Neto, J., A. D. Aguiar, G. S. da Silva, M. L. Chizzotti*, R. C. Anderson, and **L. O. Tedeschi**. 2007. Evaluating factors that impact the dynamics of in vitro fermentation using gas production technique. 2. Rumen fluid donor and sample incubation method. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 93-96 p.

3.5. Ribeiro, F. R. B., **L. O. Tedeschi**, J. Stouffer, and G. E. Carstens. 2007. A novel technique to assess internal body fat of cattle using real-time ultrasound. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 37-42 p.

3.6. Ribeiro, F. R. B., G. E. Carstens, P. A. Lancaster, **L. O. Tedeschi**, and M. E. Davis. 2007. Relationships of feed efficiency with carcass and non-carcass tissue composition in Angus bulls and heifers. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 121-124 p.

3.7. Vieira, R. A. M., **L. O. Tedeschi**, and A. Cannas. 2007. A generalized model for describing fiber dynamics in the ruminant gastrointestinal tract. 1. The heterogeneity of the pool of fiber particles in the rumen-reticulum. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 97-102 p.

3.8. Vieira, R. A. M., **L. O. Tedeschi**, and A. Cannas. 2007. A generalized model for describing fiber dynamics in the ruminant gastrointestinal tract. 2. Accounting for heterogeneous pools in the rumen-reticulum. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 103-110 p.

3.9. Vieira, R. A. M., **L. O. Tedeschi**, and A. Cannas. 2007. A generalized model for describing fiber dynamics in the ruminant gastrointestinal tract. 3. Estimating digestion-related kinetics parameters. 2007 Beef Cattle Report in Texas. Texas A&M University, College Station, TX. 111-120 p.

4. 2008

4.1. Monteiro, C. C., D. d. S. Pina, A. D. Aguiar, E. G. Trickett, R. A. dos Santos, R. Anderson, W. Pinchak, and **L. O. Tedeschi**. 2008. Comparison between two systems to measure gas production of in vitro fermentation of ruminant feeds. 2008 Beef Cattle Report in Texas. Texas A&M University, College Station, TX.

4.2. Pina, D. S., C. C. Monteiro, A. D. Aguiar, E. G. Trickett, **L. O. Tedeschi**, S. C. Valadares Filho, J. A. G. Azevedo, and R. Anderson. 2008. Influence of calcium oxide level and time of exposure to sugarcane on in vitro fermentation kinetics. 2008 Beef Cattle Report in Texas. Texas A&M University, College Station, TX.

4.3. Pina, D. S., C. C. Monteiro, A. D. Aguiar, E. G. Trickett, **L. O. Tedeschi**, S. C. Valadares Filho, J. A. G. Azevedo, and R. Anderson. 2008. Influence of calcium oxide level and time of exposure to sugarcane on the in situ fermentation kinetics. 2008 Beef Cattle Report in Texas. Texas A&M University, College Station, TX.

4.4. **Tedeschi, L. O.**, P. Schofield, and A. N. Pell. 2008. Determining feed quality for ruminants using in vitro gas production technique. 1. Building an anaerobic fermentation chamber. 2008 Beef Cattle Report in Texas. Texas A&M University, College Station, TX.

4.5. **Tedeschi, L. O.**, P. Schofield, and A. N. Pell. 2008. Determining feed quality for ruminants using in vitro gas production technique. 2. Evaluating different models to assess gas production measurements. 2008 Beef Cattle Report in Texas. Texas A&M University, College Station, TX.

5. 2010

5.1. Aguiar, A. D., **L. O. Tedeschi**, B. M. Bourg, A. Ortega, and K. C. McCuistion. 2010. Evaluation of predicted dry matter intake of grazing beef cows using a mechanistic CNCPS model and forage quality data. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 103-110 p.

5.2. Aguiar, A. D., **L. O. Tedeschi**, F. M. Rouquette, R. D. Randel, C. M. Hensarling, and T. D. A. Forbes. 2010. Statistical variation in predicting dry matter intake of brahman bulls under grazing condition using the n-alkane technique. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 147-150 p.

5.3. Bourg, B. M., **L. O. Tedeschi**, A. D. Aguiar, F. R. B. Ribeiro, R. R. Gomez, J. Genho, D. DeLaney, and S. Moore. 2010. Using a mechanistic nutrition model to identify

efficient beef cows under grazing conditions. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 111-116 p.

5.4. Carter, J. A., F. R. B. Ribeiro, C. A. Hughes, **L. O. Tedeschi**, G. E. Carstens, R. K. Miller, S. B. Smith, R. D. Rhoades, and B. M. Bourg. 2010. The accuracy of real-time ultrasound to measure carcass traits in beef cattle prior to slaughter. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 41-43 p.

5.5. Hughes, C. A., F. R. B. Ribeiro, J. A. Carter, T. D. A. Forbes, F. M. Rouquette, Jr., **L. O. Tedeschi**, and R. D. Randel. 2010. Use of real-time ultrasound (RTU) measurements and carcass traits to assess internal fat in residual feed intake (RFI)-indexed Brahman bulls. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 55-57 p.

5.6. Krueger, W. K., G. E. Carstens, R. R. Gomez, P. A. Lancaster, L. J. Slay, **L. O. Tedeschi**, J. C. Miller, N. A. Krueger, S. M. Horrocks, R. C. Anderson, C. Hensarling, and T. D. A. Forbes. 2010. Relationships between residual feed intake an apparent nutrient digestibility in growing beef calves. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 121-126 p.

5.7. Ribeiro, F. R. B., R. K. Miller, E. G. Brown, P. A. Lancaster, **L. O. Tedeschi**, S. Moore, D. DeLaney, and G. E. Carstens. 2010. Relationships between residual feed intake and carcass quality traits in Santa Gertrudis steers. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 67-73 p.

5.8. Ribeiro, F. R. B., R. D. Rhoades, **L. O. Tedeschi**, S. B. Smith, S. E. Martin, and S. F. Crouse. 2010. Evaluating the application of dual X-ray energy absorptiometry (DEXA) to assess dissectible fat and muscle from the 9 to 11th rib section of beef cattle. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 81-84 p.

5.9. Ribeiro, F. R. B., **L. O. Tedeschi**, J. Stouffer, and G. E. Carstens. 2010. The use of real-time ultrasound and carcass measurements to estimate total internal fat in beef cattle. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 75-80 p.

5.10. Williams, W. L., **L. O. Tedeschi**, P. J. Kononoff, T. R. Callaway, S. E. Dowd, K. Karges, and M. L. Gibson. 2010. Identification of rumen bacteria population shifts using 16s rDNA bacterial tag-encoded FLX amplicon pyrosequencing when fermenting corn milling (co)products of different processing methods. 2009-2010 Beef Cattle Research in Texas. Texas A&M University, College Station, TX. 137-145 p.

6. 2011 (Associate Professor at TAMU)

6.1. Bourg, B. M., **L. O. Tedeschi**, A. D. Aguiar, F. R. B. Ribeiro, R. R. Gomez, J. Genho, D. DeLaney, and S. Moore. 2011. Using a mechanistic nutrition model to identify efficient beef cows under grazing conditions: Year 3 of data collection. 2011 Beef Cattle Research in Texas. Texas A&M University, College Station, TX.

7. 2014

7.1. Fonseca, M. A., W. L. Crossland, **L. O. Tedeschi**, T. R. Callaway, and G. E. Carstens. 2014. Alternatives to reduce methane production from beef cattle: A case study for dried distillers' grain (DDG). Pages J5-J15 in Beef Cattle Short Course, College Station, TX. Texas A&M University.

Industry-Related

1. Prior to 2000

1.1. **Tedeschi, L. O.** Volumosos para bovinos de corte. Notesalq. v. 5, Jan., 1996. (*Roughage for beef cattle*).
1.2. Mattos, W. R. S. and **L. O. Tedeschi**. Encefalopatia espongiforme bovina (síndrome da vaca louca). Boletim do Leite. v. 3, n. 27, Maio, 1996. (*Bovine spongiform encephalopathy - Mad cow disease*);
1.3. Mattos, W. R. S. and **L. O. Tedeschi**. Encefalopatia espongiforme bovina (síndrome da vaca louca). Notesalq. v. 5, Jan., 1997. (*Bovine spongiform encephalopathy - Mad cow disease*);
1.4. **Tedeschi, L. O.** Análise de alimentos para bovinos: o que devemos saber? Notesalq, v. 6, out. 1997. (*Feed analysis for bovines: what should we know?*);
1.5. **Tedeschi, L. O.**, C. Boin, D. P. D. Lanna. Aditivos para bovinos de corte (I). Revista Pecuária de Corte, v. 8, n. 71, 1997. (*Feed additives for beef cattle*);
1.6. **Tedeschi, L. O.**, C. Boin, D. P. D. Lanna. Aditivos para bovinos de corte (II). Revista Pecuária de Corte, v. 8, n. 72, 1997. (*Feed additives for beef cattle*);

2. 2011

2.1. Vasconcelos, J. T., and L. O. Tedeschi. 2011. O impacto ambiental do uso de aditivos na produção pecuária (*The environmental impact of feed additives in the beef cattle industry*). Revista Pecuária Corte.32-34.

3. 2020

3.1. Norris, A. B., and L. O. Tedeschi 2020. Heat load in tropically adapted cattle. Bradford News. 34:18-19. Available at: https://issuu.com/unitedbrafordbreeders/docs/summer2020-hrAccessed
3.2. **Tedeschi, L. O.** 2020. Modelling a sustainable future for livestock production. Scientia.1-5. doi: 10.33548/SCIENTIA523. Available at: https://www.scientia.global/dr-luis-tedeschi-modelling-a-sustainable-future-for-livestock-production

Professional Output

Tabular Summary

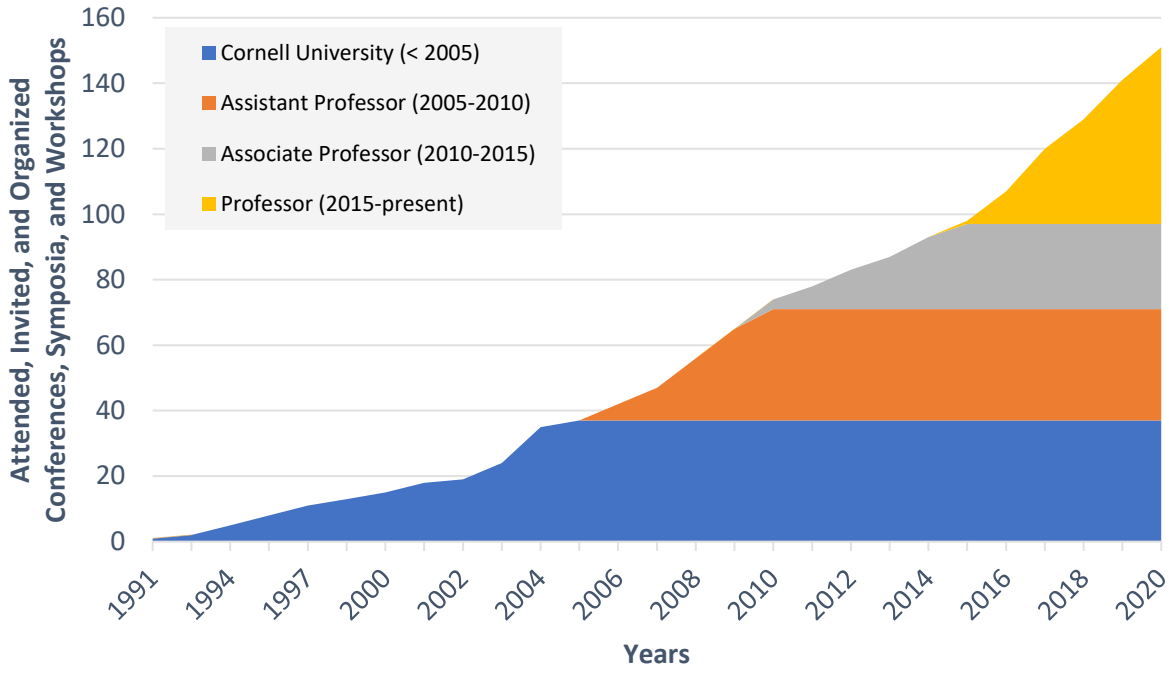
Type		Since the last faculty position [2]			Career
	Prior	Assist.	Assoc.	Prof.	
Workshops and short courses (Invited)	23	9	11	4	47
Conferences, symposia, and seminars (Invited)	10	10	13	32	65
Conferences, symposia, and seminars (Attended) [1]	4	15	2	18	39
Workshops, conferences, and symposia (Organized)	—	—	—	9	9
Total	**37**	**34**	**26**	**63**	**160**

[1] Without abstract presentation.
[2] Assistant Professor: 2005 to 2010, Associate Professor: 2010 to 2015, Professor: September 1st, 2015.

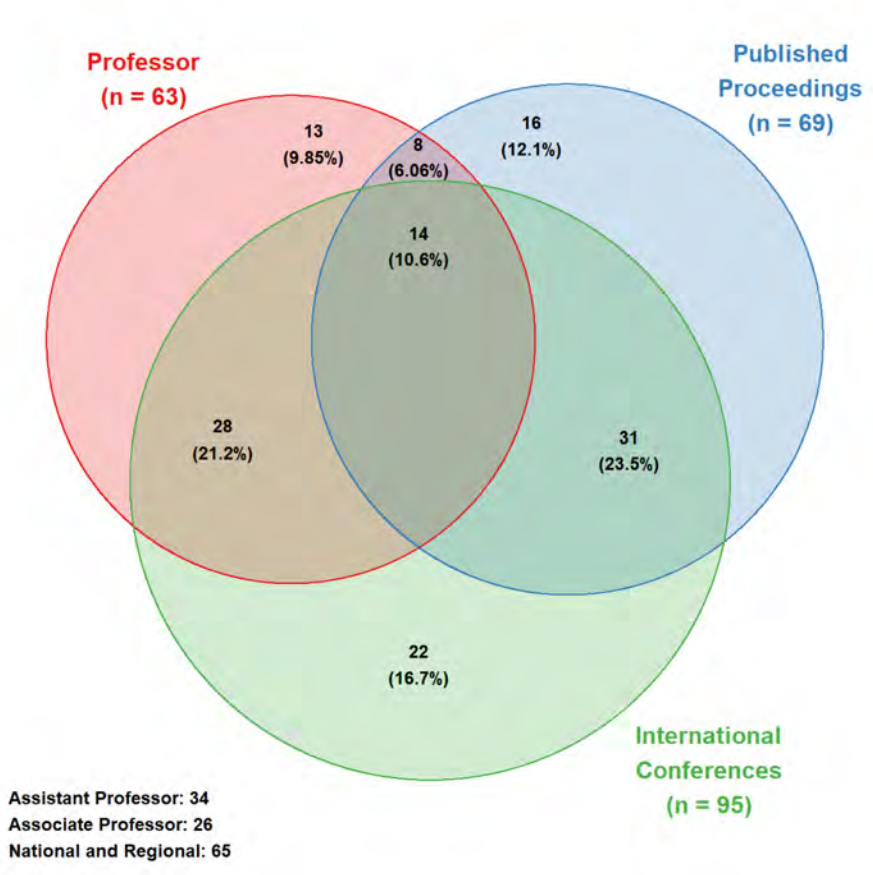
Type	Prior		Since the last faculty positions [1]									Career			
			Assistant		Associate			Professor							
	I [2]	A	I	A	I	A		I	A	O		I	A	O	T
International	19	—	15	1	17	1		28	8	6		79	10	6	95
National	4	—	2	3	4	—		5	3	1		15	6	1	22
Regional	10	4	2	11	3	1		3	7	2		18	23	2	42
Total	**33**	**4**	**19**	**15**	**24**	**2**		**36**	**18**	**9**		**112**	**39**	**9**	**160**

[1] Assistant Professor: 2005 to 2010, Associate Professor: 2010 to 2015, Professor: September 1st, 2015.
[2] I = Invited, A = Attended, O = Organized, T = Total.

Graphical Summary



Venn Diagram Summary



Invited Workshops and Short Courses

I = Invited, and R = Regional, Nat = National, and Intl = International are residence relative.

1. Prior to 2000

1.1. 30 Mar 1994. ESALQ/USP, Piracicaba, SP, Brazil. Short Course of Cattle Ration Formulation using Microcomputers, 1st. (I/R)

1.2. 31 May 1994. ESALQ/USP, Piracicaba, SP, Brazil. Short Course of Cattle Ration Formulation using Microcomputers, 2nd. (I/R)

1.3. 11-13 Dec 1996. ESALQ/USP, Piracicaba, SP, Brazil. Short Course of Cattle Ration Formulation using Microcomputers, 7th. (I/R)

1.4. 26-28 Mar 1997. ESALQ/USP, Piracicaba, SP, Brazil. Short Course of Cattle Ration Formulation using Microcomputers, 8th. (I/R)

1.5. 27 Feb 1997. ESALQ/USP, Piracicaba, SP, Brazil. Short Course of the Cornell Net Carbohydrate and Protein System for Tropical Applications. (I/R)

1.6. 12 Apr 1999. University of Zamorano, Tegucigalpa, Honduras. Workshop seminar. Title: Cornell Net Carbohydrate and Protein System: A model to predict cattle nutrient requirements in diverse conditions. (I/Intl)

2. 2000 to 2005

2.1. 27-30 Jun 2000. CORPOICA, Santa Fé de Bogotá, Colombia. Workshop seminar. Title: 1. Cornell Net Carbohydrate and Protein System (CNCPS): A model to predict cattle nutrient requirements in diverse conditions; and 2. Cornell Net Carbohydrate and Protein System (CNCPS): Evaluation of the model, and Applications of the CNCPS for farm sustainability. (I/Intl)

2.2. 06 Jul 2000. EMBRAPA/CNPGL, Juiz de Fora, MG, Brazil. Workshop seminar. Title: Cornell Net Carbohydrate and Protein System (CNCPS): A model to predict cattle nutrient requirements in diverse conditions. (I/Intl)

2.3. 22 Aug 2001. FZEA/USP, Pirassununga, SP, Brazil. Workshop seminar. Title: Mathematical models to describe ruminant nutrition and management. (I/Intl)

2.4. 28 Sep 2001. ESALQ/USP, Piracicaba, SP, Brazil. Workshop seminar. Title: Mathematical models to describe ruminant nutrition and management. (I/Intl)

2.5. 21-23 Aug 2003. Evaluating beef efficiency and Cornell Value Discovery System for cow-calf, Bell Ranch, NM, USA. National Beef Cattle Evaluation Consortium. (I/Nat)

2.6. 10 Nov 2003. FZEA/USP, Pirassununga, SP, Brazil. Workshop seminar. Title: Using the CNCPS model to apply knowledge of cattle requirements and ruminal fermentation. (I/Intl)

2.7. 28 Nov 2003. Bellman, São José do Rio Preto, SP, Brazil. Workshop seminar. Title: Utilizando-se do modelo matemático de Cornell (CNCPS) para estimar exigências nutricionais de ruminantes (Using the mathematical model of Cornell (CNCPS) to predict nutrient requirements of ruminants). (I/Intl)

2.8. 11-12 Dec 2003. EMBRAPA/CNPGC, Campo Grande, MS, Brazil. Workshop seminar. Title: Desenvolvimento de linhas de pesquisa para adequação do modelo Cornell Net Carbohydrate and Protein System - CNCPS - às condições tropicais (Workshop on development of a research program to adapt the CNPS model to tropical conditions). (I/Intl)

2.9. 03-04 Nov 2003. EMBRAPA/CNPGL, Juiz de Fora, MG, Brazil. Adaptação do modelo Cornell Net Carbohydrate and Protein System - CNCPS - às condições tropicais (Adaptation of the CNPS model to tropical conditions). (I/Intl)

2.10. 28 May 2004. Università degli Studi di Sassari, Sassari, Italy. Research to improve the Cornell Net Carbohydrate and Protein System. (I/Intl)

2.11. 03-04 Jun 2004. Università degli Studi di Sassari, Sassari, Italy. Workshop on the assessment of adequacy of mathematical models and the meta-analysis. (I/Intl)

2.12. 06-08 Sep 2004. University of Wageningen, Wageningen, Netherlands. Modellers Workshop, 6th. Title: A mechanistic nutrition model to evaluate beef cow efficiency. (I/Intl)

2.13. 11-15 Oct 2004. University of Yucatán, Merida, Mexico. Workshop seminar. Title: Uso de un modelo computacional para el manejo nutricional de bovinos y ovinos (Using a computer model for nutritional management of bovines and ovines). (I/Intl)

2.14. 02-03 Nov 2004. Texas A&M University, College Station, TX, USA. Workshop seminar. Title: Modeling ruminal fermentation and nutrient requirements of cattle with the CNCPS and Using nutrition models to assist in identifying efficient animals. (I/Nat)

2.15. 27 Nov-15 Dec 2004. UNESP, Jaboticabal, SP, Brazil. Workshop seminar. Title: O uso dos modelos Cornell Net Carbohydrate and Protein System - CNCPS - e Cornell Value Discovery System - CVDS - para aumentar a produtividade bovina no Estado

de São Paulo (The use of the CNCPS and CVDS models to São Paulo State to improve the productivity of cattle production). (I/Intl)

2.16. 15-17 Dec 2004. EMBRAPA/CNPGL, Juiz de Fora, MG, Brazil. II Workshop sobre desenvolvimento de linhas de pesquisa para adequação do modelo Cornell Net Carbohydrate and Protein System - CNCPS - às condições tropicais (Workshop on development of a research program to adapt the CNPS model to tropical conditions). (I/Intl)

2.17. 19-20 Aug 2005. Noble Foundation, Ardmore, OK, USA. Feed Efficiency Workshop. Title: Cow efficiency. (I/Nat)

3. 2006 to 2010

3.1. 23-27 Oct 2006. Cornell University, Syracuse, NY, USA. Cornell Nutrition Conference. Title: Impact of economic and nutrition models in the beef industry. (I/Nat)

3.2. 21-22 Nov 2006. EMBRAPA/CNPGL, Juiz de Fora, MG, Brazil. III Workshop sobre Adaptação do modelo Cornell Net Carbohydrate and Protein System - CNCPS - às condições tropicais (3rd Workshop on Adaptation of the CNPS model to tropical conditions). (I/Intl)

3.3. 15-16 Mar 2007. Nutron, Goiânia, GO, Brazil. 2o Workshop Negócios e Tendências na Pecuária de Corte (2nd Workshop on Business and Trend in Beef Cattle). Title: Uso de modelos na determinação do ponto ótimo de abate de bovinos confinados (Using models to determine the optimum slaughter point of feedlot animals). (I/Intl)

3.4. 28-30 Jul 2007. UNESP, Jaboticabal, SP, Brazil. Workshop Modeling in Animal Production. Title: 1. Different approaches in modeling animal production; 2. Assessment of the adequacy of mathematical models; and 3. Application of scientific knowledge in the development of ruminant nutrition models. (I/Intl)

3.5. 18-20 Sep 2007. Università degli Studi di Sassari, Sassari, Italy. Workshop on Modeling Techniques and the Assessment of Adequacy of Mathematical Models. Title: 1. Meta-analysis in mathematical modeling; 2. Assessment of the adequacy of mathematical models; and 3. System Dynamics in Nutrition Modeling. (I/Intl)

3.6. 30 Mar-02 Apr 2008. Nutron/Provimi, Amarillo, TX, USA. Technical Training 2008 for Nutron/Provimi. Title: The use of mathematical models to improve carcass quality and profitability of feedlot cattle. (I/R)

3.7. 25-26 Nov 2008. EMBRAPA/CNPGL, Juiz de Fora, MG, Brazil. IV Workshop de modelagem da nutrição de ruminantes: Aplicação da técnica de produção de gases (4th workshop of modeling of ruminant nutrition: Application of the gas production technique). (I/Intl)

3.8. 23-24 Nov 2009. University of Uberaba, Uberaba, MG, Brazil. Workshop seminar. Title: Avaliação de Dietas para Ruminantes pelo Cornell Net Carbohydrate and Protein System (Diet evaluation for Ruminants using the Cornell Net Carbohydrate and Protein System). (I/Intl)

3.9. 04-09 Apr 2010. Hue Agriculture University, Hue, Vietnam. Workshop seminar. Title: Development of Mathematical Models to Estimate Animal Performance and Feed Biological Values. (I/Intl)

3.10. 01-03 Sep 2010. Università degli Studi di Sassari, Sassari, Italy. Workshop seminar. Title: 1. Meta-Analysis and Meta-Regression in Mathematical Modeling; and 2. Models to Assist in the Determination of the Fractional Passage and Degradation Rates. (I/Intl)

4. **2011 to 2015**
   - 4.1. 07-10 Nov 2011. University of Zacatecas, Zacatecas, Mexico. Workshop seminar. Title: 1. Meta-Analysis in Mathematical Modeling; 2. Assessing model adequacy; and 3. Introduction to System Dynamics. (I/Intl)
   - 4.2. 11-13 Apr 2012. Texas A&M University, San Antonio, TX, USA. Elanco Conference at Plains Nutrition Council. Title: Using Nutrition Models to Increase Profitability of Feedyards. (I/R)
   - 4.3. 10 Sep 2012. Università degli Studi di Sassari, Sassari, Italy. Workshop seminar. Title: The Role of Mathematical Models to Support Research in Animal Science: A Sustainability Perspective. (I/Intl)
   - 4.4. 09-13 Dec 2013. ESALQ/USP, Piracicaba, SP, Brazil. Workshop on Nutrition Models, Modeling Techniques, and Assessment of Adequacy of Mathematical Models. (I/Intl)
   - 4.5. 25-26 Feb 2013. Washington, DC, USA. First Meeting of the Committee on Nutrient Requirements of Beef Cattle. (I/Nat)
   - 4.6. 17-18 Sep 2013. Irvine, CA, USA. Second Meeting of the Committee on Nutrient Requirements of Beef Cattle. (I/Nat)
   - 4.7. 05-06 Nov 2014. EMBRAPA/CNPCO, Fortaleza, CE, Brazil. II Workshop de Acompanhamento do Projeto FNIRS (II Workshop of the Update on the Fecal NIRS Project). (I/Intl)
   - 4.8. 18-19 Feb 2014. Washington, DC, USA. Third Meeting of the Committee on Nutrient Requirements of Beef Cattle. (I/Nat)
   - 4.9. 11 Apr 2014. San Antonio, TX, USA. Fourth Meeting of the Committee on Nutrient Requirements of Beef Cattle. (I/R)
   - 4.10. 03-14 Aug 2015. ESALQ/USP, Piracicaba, SP, Brazil. Introduction to System Dynamics for Animal Production. (I/Intl)
5. **2016 to 2020**
   - 5.1. 12-14 Sep 2019. Belo Horizonte, MG, Brazil. Course on Indirect Calorimetry. Title: Measuring energy retention by comparative slaughter methods; Explanation of approach, do's and don'ts, comparison with other methods. (I/Intl)
   - 5.2. 14-17 Sep 2019. Itamambuca Eco Resort, Ubatuba, SP, Brazil. Modelling Nutrient Digestion and Utilization in Farm Animals. Title: "Can artificial intelligence improve the prediction adequacy of mathematical modeling in ruminant nutrition?" and "'Assessing differences in livestock sustainability and efficiency in arid, temperate and sub-tropical environments using a dynamic beef water footprint model". (I/Intl)
   - 5.3. 18-22 Nov 2019. Inner Mongolia Academy of Agricultural and Animal Sciences, Hohhot, Inner Mongolia, China. Technical Visit. Title: The Role of Mathematical Modeling in Ruminant Nutrition: A Sustainable Production Perspective. (I/Intl)
6. **2021 to 2025**
   - 6.1. 10-13 Aug 2021. Monterrey, Mexico, Mexico. Phibro Workshop on Update of Virginiamycin. (I/Intl)

Invited Conferences, Symposia, and Seminars

I = Invited, and R = Regional, Nat = National, and Intl = International are residence relative.

1. **Prior to 2000**

1.1. 07-09 Sep 1993. ESALQ/USP, Piracicaba, SP, Brazil. Symposium of Beef Cattle Nutrition, 5th. (I/R)
1.2. 08-10 Oct 1996. ESALQ/USP, Piracicaba, SP, Brazil. Symposium of Beef Cattle Management, 4th. (I/R)
1.3. 07-09 Sep 1999. University of Missouri-Columbia, Columbia, MO, USA. Conference. Title: Cornell Net Carbohydrate and Protein System: A model to predict cattle nutrient requirements in diverse conditions. (I/Nat)

2. 2000 to 2005

2.1. 03 Apr 2001. Cornell University, Ithaca, NY, USA. Seminar. Title: Development and evaluation of models for the Cornell net carbohydrate and protein system. (I/R)
2.2. 09 Mar 2002. Cornell University, Ithaca, NY, USA. Hoof to Rail. Title: Implant strategies vs carcass quality and composition. (I/R)
2.3. 05 Jun 2004. Facoltá di Medicina Veterinaria Teramo, Teramo, Italy. Conference. Title: Applying scientific knowledge in the development of the Cornell Net Carbohydrate and Protein System. (I/Intl)
2.4. 10 Jun 2004. SvG Italia, Cremona, Italy. Conference. Title: CNCPS: un modello per la stima dei fabbisogni (CNCPS: a model to estimate requirements). (I/Intl)
2.5. 10 Jul 2004. NAVAL Nutrição Animal, Mineiros, GO, Brazil. Conference. Title: Tendência mundial da nutrição animal e Estratégias nutricionais na produção de gado de corte no Brasil (World tendency of animal production and Nutritional strategies for beef cattle production in Brazil). (I/Intl)
2.6. 09 Nov 2004. University of Guelph, Guelph, Ontario, Canada. Seminar. Title: Using nutrition models to assist in identifying efficient animals. (I/Intl)
2.7. 13-14 Jun 2005. Cornell University, Ithaca, NY, USA. Cornell Veterinary Conference. Title: Potential Environmental Benefits of Ionophores in Ruminant Diets. (I/R)

3. 2006

3.1. 15-17 Jun 2006. Universidade Federal de Viçosa, Viçosa, MG, Brazil. 1st International Symposium of Beef Cattle Production. Title: Using Mathematical Nutrition Models to Improve Beef Cattle Efficiency. (I/Intl)
3.2. 14-17 Aug 2006. The Hotel Roanoke and Conference Center, Roanoke, VA, USA. Mathematical Modeling in Nutrition and the Health Sciences. Title: Identifiability and Accuracy: Two critical problems associated with the application of models in nutrition and the health sciences. (I/Nat)

4. 2007

4.1. 09-13 Sep 2007. Vichy, France. 2nd International Symposium on Energy and Protein Metabolism and Nutrition. Title: Using meta-analysis to study residual feed intake and CVDS model predictions of feed intake and efficiency in growing and finishing cattle. (I/Intl)

5. 2008

5.1. 07-09 May 2008. Aguascalientes, Mexico. 1st International Symposium on Beef Cattle. Title: 1. Development of Mathematical Models to Estimate Animal Performance and Feed Biological Values; and 2. Nutrition Models to Improve Carcass Quality and Profitability of Beef Cattle. (I/Intl)
5.2. 02-04 Jul 2008. Yanbian University of Science and Technology, Yanji, Yanbian, China. International Symposium on The Developmental Strategies of Animal Science and Animal Production in China. Title: Nutrition Models to Improve Beef Cattle Production Efficiency. (I/Intl)

5.3. 31 Aug-05 Sep 2008. Queretaro, Mexico. 9th International Conference on Goats. Title: Development and evaluation of a nutrition model to account for dietary supply and requirements of nutrients for sheep and goats. (I/Intl)

5.4. 21-25 Jul 2008. Universidade Federal de Lavras, Lavras, MG, Brazil. 45th Annual Meeting of the Brazilian Society of Animal Science. Title: Development and evaluation of a nutrition model to account for dietary supply and requirements of nutrients for sheep and goats. (I/Intl)

6. 2009

6.1. 04-06 May 2009. Aguascalientes, Mexico. 2nd International Symposium on Beef Cattle. Title: Development of Mathematical Models to Estimate Animal Performance and Feed Biological Values. (I/Intl)

6.2. 10-12 Sep 2009. Paris, France. Modeling Nutrition for Farm Animals. Title: An interactive, mechanistic nutrition model to determine energy efficiency of lactating dairy cows. (I/Intl)

7. 2010

7.1. 22-23 Apr 2010. San Antonio, TX, USA. Plains Nutrition Council. Title: The Application of Nutrition Models to Determine Feed Efficiency in Beef Cattle. (I/R)

7.2. 06-10 Sep 2010. Parma, Italy. International Symposium on Energy and Protein. Title: The Efficiency of Use of Metabolizable Energy for Growth in Ruminants. (I/Intl)

7.3. 20-22 Sep 2010. Recife, PE, Brazil. 10th International Conference on Goats. Title: System Dynamics as a Management Tool for Small Ruminant Production. (I/Intl)

8. 2011

8.1. 21-26 Jun 2011. Palmira, Colombia. 2nd International Symposium on Genómica Y Modelación en los Nuevos Escenarios de la Ganaderia Bovina Tropical. Title: The Application of System Dynamics Modeling to Enhance Profitability and Sustainability in Latin American Livestock Systems. (I/Intl)

8.2. 15-23 Jul 2011. Belém, PA, Brazil. 48th Annual Meeting of the Brazilian Society of Animal Science. Title: Potential environmental benefits of feed additives and other strategies for ruminant production. (I/Intl)

8.3. 19-28 Oct 2011. Lavras, MG, Brazil. VII SIMPEC International Symposium of Beef Cattle. Title: A model to improve carcass quality and profitability of beef cattle: The CVDS technology. (I/Intl)

9. 2012

9.1. 28 Mar-08 Apr 2012. Campo Grande, MS, Brazil. International Congress Savannas and Wetlands – Rural Sustainable Development. Title: The Beef Cattle Industry in the USA: Similarities & Differences with Brazil. (I/Intl)

9.2. 25-26 Oct 2012. Fortaleza, CE, Brazil. Bases Teóricas e Práticas da Experimentação com Pequenos Ruminantes em Pastejo no Nordeste Brasileiro (Theoretical and Practical Bases for Experimentation with Small Ruminants in the Northeast of Brazil). Title: Adaptation of the Current Models to Predict Nutritional Requirements of grazing Small Ruminant in the Brazilian Northeast. (I/Intl)

9.3. 11-13 Dec 2012. ESALQ/USP, São Pedro, SP, Brazil. 7th International Symposium on Beef Cattle. Title: Grain Processing Interactions with Cattle Breed: Bos indicus x Bos taurus. (I/Intl)

10. 2013

10.1. 25-27 Jul 2013. Campinas, SP, Brazil. 50th Annual Meeting of the Brazilian Society of Animal Science. Title: Models of protein and amino acid requirements for cattle. (I/Intl)

11. 2014

11.1. 04-06 Aug 2014. Texas A&M University, College Station, TX, USA. 60th Annual Texas A&M Beef Cattle Short Course. Title: Alternatives to Reduce Methane Production from Beef Cattle: DDG. (I/R)

12. 2015

12.1. 23 Jun 2015. ESALQ/USP, Piracicaba, SP, Brazil. 30th Training in Beef Cattle Nutrition and Diet Formulation using Computers (30o Treinamento em Nutrição e Formulação de Rações em Microcomputadores para Bovinos de Corte). Title: Using the Large Ruminant Nutrition System to formulate diets. (I/Intl)

12.2. 16 Jul 2015. Orlando, FL, USA. ADSA - ASAS Joint Annual Meeting (JAM). Title: Breaking the boundaries of animal science research through internationalization programs. (I/Nat)

12.3. 19-23 Jul 2015. Belo Horizonte, MG, Brazil. 52th Annual Meeting of the Brazilian Society of Animal Science. Title: Future implications for animal production: A perspective on sustainable livestock intensification. (I/Intl)

12.4. 28-30 Sep 2015. URGS, Porto Alegre, RS, Brazil. X Jornada NESPRO and II International Symposium on Beef Cattle Production System. Title: Energy and Nutrient Requirements of Grazing and Confined Growing Beef Cattle. (I/Intl)

13. 2016

13.1. 19-23 Jul 2016. Salt Lake City, UT, USA. ADSA-ASAS Joint Annual Meeting (JAM). Title: 1. Traditional versus structure-based model development strategies; and 2. The Beef Cattle Nutrient Requirement Model (BCNRM) 2016. (I/Nat)

13.2. 27-28 Oct 2016. Universidade Federal de Viçosa, Viçosa, MG, Brazil. BR-Corte (2016) – Nutrient Requirements of Zebu and Crossbred Cattle. Title: Comparison of Protein Requirements: BCNRM (2016) x BR-Corte (2016). (I/Intl)

13.3. 11-12 Nov 2016. University of Nebraska-Lincoln, Lincoln, NE, USA. Husker Beef Nutrition Conference. Title: The Beef Cattle Nutrient Requirement Model (BCNRM). (I/Nat)

14. 2017

14.1. 09-17 Feb 2017. São Paulo, SP, Brazil. DSM - International Symposium on Vitamins and Technologies. Title: Overview of Revisions of the NRC (1996, 2000). (I/Intl)

14.2. 24-29 Mar 2017. Buenos Aires, Argentina. Phibro Workshop on Nutrient Requirement for Beef Cattle. Title: Overview of Revisions of the NRC (1996, 2000) and Case Studies. (I/Intl)

14.3. 25-28 Apr 2017. Botucatu, SP, Brazil. VI Simpósio Internacional de Nutrição de Ruminantes (VI International Symposium on Ruminant Nutrition). Title: Overview of Revisions of the NRC (1996, 2000). (I/Intl)

14.4. 10-20 Jun 2017. Beijing, China. 2nd China's National Symposium on Applied Techniques and Industry Economics in Beef Production. Title: Development and Evaluation of the 2016 Nutrient Requirements for Beef Cattle. (I/Intl)

14.5. 23-25 Oct 2017. University of New England, Armidale, Australia. Recent Advances in Animal Nutrition. Title: Estimating Protein and Energy Requirements of Ruminants – Beef Cattle. (I/Intl)

14.6. 04-05 Dec 2017. National Academies of Sciences, Engineering, and Medicine, Washington, DC, USA. Sustainable Livestock & Poultry Production Convening Event. Title: The Role of Computer Models in Food and Agriculture. (I/Nat)

14.7. 07-08 Dec 2017. UNIMEP, Piracicaba, SP, Brazil. 8th Symposium on Beef Cattle: "Feedlot Cattle Production". Title: Determination of Optimum Slaughter Point. (I/Intl)

15. 2018

15.1. 03 Apr 2018. Phibro Animal Health, San Antonio, TX, USA. Phibro's Ruminant Nutrition Workshop. Title: An Overview of The Ruminant Nutrition System. (A/R)

15.2. 08-12 Jul 2018. Vancouver Conference Center, Vancouver, BC, Canada. ASAS Annual Meeting. Title: 1. Assessment of Pasture Supplementation Needs with Modern Computer Models; 2. Towards sustainable alternatives to antibiotics. 1: The evaluation of an active dried yeast in the diets of finishing steers on growth performance and carcass composition; and 3. Towards sustainable alternatives to antibiotics. 2: The evaluation of an active dried yeast in the diets of finishing steers on feedlot performance, rumen pH and liver health. (I/Intl)

15.3. 16-17 Jul 2018. Culiacán, Sinaloa, Mexico. 1er Sukarne Investigación de Ganado de Engorda. (I/Intl)

15.4. 12-13 Sep 2018. University of California-Davis, Davis, CA, USA. 50th Anniversary Symposium of the California Net Energy System. Title: Relationships between retained energy and retained protein. (I/Nat)

15.5. 17 Oct 2018. Seoul, South Korea. International Dairy Federation – World Dairy Summit. The Central Role of Modeling for Precision Farming Applications (I/Intl)

16. 2019

16.1. 08-11 Mar 2019. Uberlândia, MG, Brazil. XXIII Curso Novos Enfoques na Produção e Reprodução de Bovinos. Title: 1. Advancements in Nutritional Requirements of Beef Cattle: Cow, 2. Advancements in Nutritional Requirements of Beef Cattle: Replacement Heifers, and 3. Advancements in Nutritional Requirements of Beef Cattle: Growing steers. (I/Intl)

16.2. 09 Jul 2019. Austin Conference Center, Austin, TX, USA. TAMU Symposium on Cattle Adapted to Tropical and Subtropical Environments. Title: Nutritional management for tropical-subtropical-adapted cattle receiving high-concentrate diets. (I/R)

16.3. 01-02 Oct 2019. Monterrey, Mexico. XXII Simposio UANL Engorga de Bovinos en Corral. Title: Recent Advances of Using Yeast to Reduce Ruminal Acidosis and Heat Stress. (I/Intl)

17. 2020

17.1. 09-14 Feb 2020. Monterrey's Real Inn Hotel, Monterrey, Mexico, Mexico. Phibro Cattle Forum 2020. Title: Implications of rumen health on overall health welfare and productivity of cattle. (I/Intl)

17.2. 06 May 2020. Online, College Station, TX, USA. Phibro Academy Webinar. Title: Rumen Health and its Importance on Cattle Productivity. (I/Intl)

17.3. 28 Jul 2020. Online, College Station, TX, USA. Phibro Global Marketing Summit. Title: Economic Impact of Acidosis in Beef Cattle. (I/Intl)

17.4. 27-28 Aug 2020. Online, College Station, TX, South Korea. Korean Society of Animal Science (KSAS) Annual Virtual Meeting. Title: Sustainable Animal Production to meet the Changes in Consumer Trends. (I/Intl)

17.5. 19-21 Oct 2020. Online, College Station, TX, USA. Earthx Conservation Conference 2020. Title: Sustainable Livestock Intensification: Producing High-Quality Protein Food within an Environmentally-Friendly Context. (I/Intl)

17.6. 01-04 Dec 2020. Online, College Station, TX, Portugal. European Federation of Animal Science (EAAP). Title: The need for hybrid neural network models in precision livestock farming systems. (I/Intl)

18. 2021

18.1. 07-09 Apr 2021. Henry B. Gonzales Convention Center, San Antonio, TX, USA. Plains Nutrition Council. Title: Research Update. (I/R)

18.2. 29 Apr 2021. Online, College Station, TX, USA. Phibro Workshop on Rumen Health 360 - Dairy Cattle. (I/Intl)

18.3. 10-14 May 2021. Online, Montreal, Canada. 2021 Animal Nutrition Conference of Canada. Title: Precision determination of energy and protein requirements of grazing and feedlot animals. (I/Intl)

18.4. 27-30 Oct 2021. Olympic Village, Olympic Valley, CA, USA. National Animal Nutrtion Program - NRSP #9. (I/Nat)

18.5. 28 Oct 2021. Online, College Station, TX, South Korea. 2021 Towards a Carbon Neutrality on Smart Livestock Farming Strategies. (I/Intl)

18.6. 07-10 Nov 2021. Salt Lake City, UT, Salt Lake City, UT, USA. 2021 ASA-CSSA-SSSA International Annual Meeting. Title: Plant CT influences on rumen methanogenesis & bypass protein. (I/Intl)

18.7. 10 Dec 2021. Universidade Federal de Viçosa, Viçosa, MG, Brazil. Avanços na Eficiência do Rúmen. (I/Intl)

Attended Conferences, Symposia, and Seminars

A = Attended, and R = Regional, Nat = National, and Intl = International are residence relative.

1. Prior to 2000

1.1. 05 Mar 1991. FEALQ-ESALQ/USP, Piracicaba, SP, Brazil. II Encontro sobre Adubação Verde (Meeting on Natural Fertilization, 2nd). (A/R)

1.2. 06-08 Sep 1994. FEALQ-ESALQ/USP, Piracicaba, SP, Brazil. 11o Simpósio sobre Manejo de Pastagem (Symposium on pasture management, 11). (A/R)

1.3. 03-05 Sep 1996. FEALQ-ESALQ/USP, Piracicaba, SP, Brazil. 13o Simpósio sobre Manejo de Pastagem (Symposium on pasture management, 13). (A/R)

1.4. 01 Apr 1997. FEALQ-ESALQ/USP, Piracicaba, SP, Brazil. Seminário de comercialização e marketing da carne bovina (Seminar on commercialization and marketing of beef meat). (A/R)

2. 2006 to 2010

2.1. 07-09 Aug 2006. Texas A&M University, College Station, TX, USA. 52th Annual Texas A&M Beef Cattle Short Course. (A/R)

2.2. 06-08 Aug 2007. Texas A&M University, College Station, TX, USA. 53th Annual Texas A&M Beef Cattle Short Course. (A/R)

2.3. 07-08 Apr 2008. Arlington, TX, USA. Mid-South Ruminant Nutrition Conference. (A/R)

2.4. 03-06 Aug 2008. Texas A&M University, College Station, TX, USA. 54th Annual Texas A&M Beef Cattle Short Course. (A/R)

2.5. 08-10 Oct 2008. Rio de Janeiro, RJ, Brazil. Funds for Improvement of Post-Secondary Education Director's Meeting. (A/Intl)

2.6. 09-10 Jan 2009. Texas A&M University, College Station, TX, USA. System Dynamics Winter Conference. (A/R)

2.7. 12-16 Jan 2009. Texas A&M University, College Station, TX, USA. Texas A&M AgriLife Conference. (A/R)
2.8. 13 Feb 2009. Texas A&M University, College Station, TX, USA. 36th Annual Texas Human Nutrition Conference. (A/R)
2.9. 06-07 Apr 2009. Arlington, TX, USA. Mid-South Ruminant Nutrition Conference. (A/R)
2.10. 09-10 Apr 2009. San Antonio, TX, USA. Plains Nutrition Council. (A/R)
2.11. 18-20 Oct 2009. Washington, DC, USA. Funds for Improvement of Post-Secondary Education Director's Meeting. (A/Nat)

3. 2010 to 2015

3.1. 11-15 Jan 2010. Texas A&M University, College Station, TX, USA. Texas A&M AgriLife Conference. (A/R)
3.2. 05 Feb 2010. Texas A&M University, College Station, TX, USA. 37th Annual Texas Human Nutrition Conference. (A/R)
3.3. 07-10 Feb 2010. Orlando, FL, USA. Southern Section of the Animal Science American Society. (A/Nat)
3.4. 07 Jun 2010. Albuquerque, NM, USA. Climate Policy and System Dynamics. (A/Nat)
3.5. 04 Nov 2014. Fortaleza, CE, Brazil. II International Seminar: Theoretical and practical background of experimentation on grazing small ruminants in the Brazilian Northeast region. (A/Intl)
3.6. 13-15 May 2014. Texas A&M University, College Station, TX, USA. Grand Challenge Mini Symposia. (A/R)

4. 2016 to 2020

4.1. 10 Feb 2016. University of Yucatán, Merida, Mexico. Yucatán-AgriLife Conference. (A/Intl)
4.2. 20-27 Feb 2016. Saigon, Vietnam. Borlaug Reciprocal Visit. (A/Intl)
4.3. 14-15 Apr 2016. San Antonio, TX, USA. Plains Nutrition Council. (A/R)
4.4. 02-05 Jun 2016. Spokane, WA, USA. Borlaug Institute Director's Meeting. (A/Nat)
4.5. 19-21 Sep 2016. University of Yucatán, Merida, Mexico. Yucatán-AgriLife Conference. (A/Intl)
4.6. 07 Mar 2017. Houston, TX, USA. International Livestock Congress. (A/R)
4.7. 16-20 Jul 2017. Baltimore Conference Center, Baltimore, MD, USA. ASAS - CSAS Annual Meeting. (A/Nat)
4.8. 27-30 Jul 2017. Boston, MA, USA. System Dynamics Society Conference. (A/Nat)
4.9. 07-09 Aug 2017. Texas A&M University, College Station, TX, USA. 63th Beef Cattle Short Course. (A/R)
4.10. 17-19 Sep 2017. International Livestock Research Institute, Nairobi, Kenya. Technical Visit. (A/Intl)
4.11. 20-22 Sep 2017. International Livestock Research Institute, Addis Ababa, Ethiopia. Technical Visit. (A/Intl)
4.12. 04-05 Apr 2018. San Antonio, TX, USA. Plains Nutrition Council. (A/R)
4.13. 06-08 Aug 2018. Texas A&M University, College Station, TX, USA. 64th Beef Cattle Short Course. (A/R)
4.14. 02-06 Sep 2018. Clermont-Ferrand, France. 10th International Symposium on the Nutrition of Herbivores. Title: Keynote: Precision nutrition of herbivores: approaches, challenges and potential gains; Quebracho (*Schinopsis balansae*) extract in beef cattle fed high-roughage total mixed ration affects manure gas emissions; Insights in dry matter intake prediction in growing goats; and The

consistency of feed efficiency ranking and the mechanism explaining efficiency variation among growing calves. (A/Intl)

4.15. 08-11 Jul 2019. Austin Conference Center, Austin, TX, USA. ASAS Annual Meeting. (A/R)

4.16. 09-12 Sep 2019. Belo Horizonte, MG, Brazil. International Symposium on Energy and Protein Metabolism and Nutrition. Title: Limitations of the Comparative Slaughter Technique in Determining Protein Requirements for Growth. (A/Intl)

4.17. 08-10 Jan 2020. Texas A&M Hotel & Conference Center, College Station, TX, USA. 2020 AgriLife Conference. (A/R)

4.18. 12-16 Oct 2020. Online, New York, NY, USDA. AgMIP - Agricultural Model Intercomparison and Improvement Project. (A/Intl)

Organized Conferences, Symposia, and Seminars

O = Organized, R = Regional, Nat = National, and Intl = International are residence relative.

1. Prior to 2019

1.1. 12-16 Mar 2016. Phibro Animal Health, Ribeirão Preto, SP, Brazil. Phibro's International Conference and Tour: The Nutrient Requirements of Beef Cattle. Title: The development of the Beef Cattle Nutrient Requirements model. (O/Intl)

1.2. 08 Jul 2018. Vancouver Conference Center, Vancouver, BC, Canada. Pre-Conference ASAS Annual Meeting "Future of data analytics in nutrition: Knowledge gaps, data collection and quality, and the role of supporting tools for sustainable development". Title: The Evolution of Mathematical Models for Animal Nutrition—what to expect next? (O/Intl)

2. 2019

2.1. 10 Apr 2019. San Antonio, TX, USA. Phibro Beef Short Course "Ruminal Health". Title: Rumen Anatomy, Physiology, Dysfunctions, and Digestive Modifiers. (O/Intl)

2.2. 12 Apr 2019. Marriott Hotel, San Antonio, TX, USA. Performance Cattle Company. Title: Thoughts for Upcoming Predictive Analytics. (O/Nat)

2.3. 08 Jul 2019. Austin Conference Center, Austin, TX, USA. Pre-Conference ASAS Annual Meeting "Model Building and Evaluation, and Data Analyses Workshops". Title: The Assessment of Model Adequacy. (O/R)

2.4. 09 Jul 2019. Austin Conference Center, Austin, TX, USA. ARPAS Symposium on Heat Stress. (O/R) Technology Transfer

3. 2020

3.1. 22 Jul 2020. Online, College Station, TX, USA. ASAS Annual Meeting "'Production, Management and Environment Symposium III: Application of Big Data, Artificial Intelligence, Smart Farming for Livestock Production". (O/Intl)

3.2. 19 Jul 2020. Online, College Station, TX, USA. Pre-Conference ASAS Annual Meeting "Mathematical Modeling in Animal Nutrition: Training the Future Generation in Data and Predictive Analytics for a Sustainable Development". (O/Intl)

4. 2021

4.1. 14-17 Jul 2021. Kentucky International Convention Center, Louisville, KY, USA. Pre-Conference ASAS Annual Meeting "Mathematical Modeling in Animal Nutrition: Training the Future Generation in Data and Predictive Analytics for a Sustainable Development - Basic Training". (O/Intl)

Outreach interviews, newsletters, and press releases

- September 23, 2014. Interview. Applied nutrition modeling producing beef more profitably, helping reduce methane emissions in feedlots.
    - https://agrilifetoday.tamu.edu/2014/09/23/applied-nutrition-modeling-producing-beef-more-profitably-helping-reduce-methane-emissions-in-feedlots/
- March 8, 2017. Interview. AgriLife Research projects evaluate feeder cattle on yeast-grain diet.
    - https://agrilifetoday.tamu.edu/2017/03/08/agrilife-research-projects-evaluate-feeder-cattle-yeast-grain-diet/
- September 18, 2020. Interview. AgriLife Research expert uses math to predict environmental impacts of livestock production.
    - https://agrilifetoday.tamu.edu/2020/09/18/agrilife-research-expert-uses-math-to-predict-environmental-impacts-of-livestock-production/

Patents

- 2007/2008. A technique to assess the internal body fat of cattle by using real-time ultrasound (Archived).

Software and Copyrights

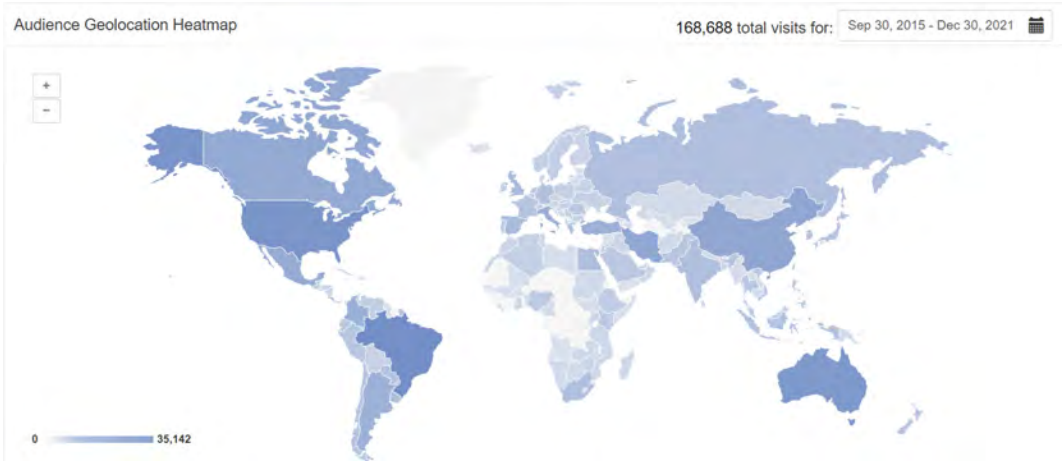
The following computer applications (software, apps) are evidence of the research and technology that Dr. Tedeschi has collaborated and developed is being utilized by more than 168,863 users in academia, industry, and producers.

- **Cattle Value Discovery System** (CVDS) webpage was created in March 2002, and its current version is 1.1.2.
    - http://www.nutritionmodels.com/cvds.html
- **Hay Game** webpage was created in February 2006, and its current version is 1.6.7919.
    - http://www.nutritionmodels.com/hay.html
- **Model Evaluation System (MES)** webpage was created in February 2006, and its current version is 3.2.4.
    - http://www.nutritionmodels.com/mes.html
- **Small Ruminant Nutrition System** (SRNS) webpage was created in February 2006, and its current version is 1.12.7919.
    - http://www.nutritionmodels.com/srns.html
- **Gas Production Fitting System** (GasFit) webpage was created in February 2008, and its current version is 3.8.7919.
    - http://www.nutritionmodels.com/gasfit.html
- **GnG1** webpage was created in February 2008, and its current version is 2.8.7919.
    - http://www.nutritionmodels.com/gng1.html
- **Large Ruminant Nutrition System** webpage was created in October 2009, and its current version is 1.2.1.
    - http://www.nutritionmodels.com/lrns.html
- **2016 Beef Cattle Nutrient Requirements Model** webpage was created in December 2016, and its current version is 1.037.16.
    - http://nutritionmodels.com/beef.html

- **Ruminant Nutrition System** webpage was created in January 2017, and its current version is 0.8.7917.
    - http://www.nutritionmodels.com/rns.html
- **Meal Criterion Calculation** webpage was created in July 2017, and its current version is 1.9.7919.
    - http://www.nutritionmodels.com/mcc.html

The Figure below depicts the worldwide visit data (168,688 times) to the Mathematical Nutrition Models website (http://nutritionmodels.tamu.edu and http://www.nutritionmodels.com) on October 10, 2021. The most visited software models are listed below:

The majority of the visits are from large livestock production countries such as Australia, Brazil, United States, Canada, and China.



XI. Languages

- Portuguese: Read, speak, and write fluently
- English: Read, speak, and write fluently
- Spanish: Read and speak well