**Biography**

Dr. Cesar A. Rosales-Nieto is an Assistant Professor in the Department of Agricultural Sciences at Texas State University. Before joining Texas State University, Dr. Rosales-Nieto worked at the University of San Luis Potosi in Mexico as a full-time Professor, and before that, at the National Institute for Forestry, Agriculture and Livestock Research (INIFAP-Mexico) as a Principal Researcher in Animal Science. Dr. Rosales-Nieto graduated from the **Universidad Autonoma de San Luis Potosi (Mexico)** with a BSc in Agronomy (Hons). He received a Master’s degree in Animal Reproduction from Texas A&M University-Kingsville. Subsequently, Dr. Rosales-Nieto obtained his **Doctoral degree in Physiology of Reproduction from the University of Western Australia**. He investigated the role of muscle and fat accumulation on the onset of puberty and the reproductive efficiency of sheep. He was a **Fulbright-Garcia Robles scholar** and pursued his post-doctoral studies at **Michigan State University (USA)** on the mechanism that underlies maternal diet manipulation on fetal programming and postnatal development.

**Research Interest**

Understanding the fundamental events that regulate animal production and reproduction is key to improving our management to manipulate the environment to increase efficiency in livestock animals. Small ruminants (goats and sheep) provide a powerful model system to investigate reproductive consequences due to the similarity between sheep and human pregnancy and their developmental trajectories during fetal and postnatal life

Dr. Rosales Nieto's research is aimed at understanding how environmental factors and nutritional manipulation at different stages of the physiological process (conception, gestation, early lactation) can influence fetal growth, milk and colostrum production, birth weight, and secondary consequences during postnatal development, the onset of puberty and reproductive efficiency of small ruminants (sheep and goats) reared in arid and semi-arid rangelands. Importantly, it is to understand the role of different placental signals, metabolites, metabolic and reproductive hormones on muscle and fat tissue on the development and further reproductive activity when an insult has occurred.

Future studies will investigate the role of different nutritional alternatives at different stages of the physiological process (conception, gestation, early lactation) to enhance the productive and reproductive efficiency of small ruminants (sheep and goats) reared in semi-arid rangelands.

**Education and PostGraduate Training**

Postdoctoral Fellowship: Michigan State University

PhD. Animal Biology Department. The University of Western Australia.

Diplomado. CIESTAAM. Universidad Autónoma Chapingo.

M Sc. Physiology of the Reproduction. Texas A&M Kingsville University.

B Sc. Facultad de Agronomía. Universidad Autónoma de San Luis Potosí.

**Honors and Awards**

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| 2017 | **Fulbright García Robles. Postdoctoral Fellowship** |
| 2016 | **Facultad de Agronomía.** Orgullo de la Facultad de Agronomía de la UASLP |
| 2015 – 2024 | **CONACyT. S**istema **N**acional de **I**nvestigadores |
| 2009 – 2013 | **CONACyT.** PhD Full scholarship |
| 2009 – 2012  | **CRC Australia.** PhD Top Up Scholarship |
| 2012 | **The University of Western Australia.** Postgrad travel Award. |
| 2007 | **Joseph P. Fontenot Student Travel Award.** Southern section ASAS scientific meeting and the National annual ASAS scientific meeting. |
| 2004 – 2006  | **Texas A&M Kingsville.** Master in Science Full scholarship |
| 2001 | **Centro Nacional de Evaluación para la Educación Superior (CENEVAL).** Testimonio de Desempeño Académico Satisfactorio |

**Citation Report**

Citations: 684

h-index: 16

<https://www.researchgate.net/profile/Cesar_Rosales_Nieto>

<https://scholar.google.com/citations?user=db5mh7UAAAAJ&hl=en>

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| Courses Taught  |
| * Animal Genetics
* Reproduction in Farm Animals
* Reproductive Management
* Sustainable Animal Production
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| Grant Support |
| * From **2000 to 2017**, I received grant funds for over 1.2 million pesos to conduct research from federal sources as a Principal Investigator or Collaborator**.**
* In 2018, I received a grant from the University of San Luis Potosi to conduct research as a Principal Investigator (500,000 pesos).
* In 2023, I received a start-up fund from Texas State University (325,352 dollars).
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| Students Supervised/Mentoring |
| Undergraduate Research (Honors) | 45 |
| Master’s degree | 4 |
| PhD | 3 |

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| Publications |
| Peer-reviewed Papers | 48 |
| Conference proceedings/abstracts (International and National Conferences) | 80 |

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| Selected Publications |

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| 2022 | Miguel Mellado, Francisco G. Véliz, Ulises Macías-Cruz, Leonel Avendaño-Reyes, José E. García, **Cesar A. Rosales-Nieto**. Effect of breed and management practices on reproductive and milking performance of rangeland goats. **Tropical Animal Health and Production, 54 (3), 193.** |
| 2021 | Thompson, A.N., Bowen, E., Keiller, J., Pegler, D., Kearney, G., **Rosales-Nieto, C.A**. The number of offspring weaned from ewe lambs is affected differently by liveweight and age at breeding. **Animals 11, 2733**. |
| 2021 | **César A. Rosales-Nieto**, Maribel Rodríguez-Aguilar, Francisco Santiago-Hernandez, Venancio Cuevas-Reyes, Manuel de J. Flores-Najera, Juan M. Vázquez-García, Jorge Urrutia-Morales, Morteza H. Ghaffari, César A. Meza-Herrera, Antonio González-Bulnes, Graeme B. Martin. Periconceptional nutrition with spineless cactus (*Opuntia ficus-indica*) improves metabolomic profiles and pregnancy outcomes in sheep. **Scientific Reports, 11, 7214.** |
| 2021 | S. García-Monjaras, R.E. Santos-Díaz, M.J. Flores-Najera, V. Cuevas-Reyes, C.A. Meza-Herrera, M. Mellado, A.J. Chay-Canul, **C.A. Rosales-Nieto**. Diet selected by mixed-breed goats on xerophytic shrubland with different milk yield potential. **Journal of Arid Environments, 186; 104429** |
| 2021 | **Cesar A. Rosales-Nieto**, Richard Ehrhardt, Alex Mantey, Barbara Makela, Todd Byrem, Almudena Veiga-Lopez. Pre-conceptional diet manipulation and fetus number can influence placenta endocrine function in sheep. **Domestic Animal Endocrinology, 74; 106577.** |
| 2020 | **C. A. Rosales Nieto**, A. Mantey, B. Makela, T. Byrem, R. Ehrhardt, A. Veiga-Lopez. Shearing during late pregnancy increases size at birth but does not alter placental endocrine responses in sheep. **Animal, 14 (4) 799-806.** |
| 2019 | **C.A. Rosales Nieto**, M.B. Ferguson, J.R. Briegel, M.P. Hedger, G.B. Martin, A.N. Thompson. Pre-pubertal growth, muscle and fat accumulation in male and female sheep – relationships with metabolic hormone concentrations, timing of puberty and reproductive outcomes. **Reproduction in Domestic Animals,** *54, 1596-1603.* |
| 2018 | **C.A. Rosales Nieto**, A.N. Thompson, G.B. Martin. A new perspective of onset of puberty in ewe lambs and early reproductive performance: a review. **Animal Production Science** 58 (11); 1967-1975. |
| 2018 | **C.A. Rosales Nieto**, M.B. Ferguson, C.A. Macleay, J.R. Briegel, D. A. Wood, G.B. Martin, R. Bencini, A.N. Thompson. Milk production and composition, and progeny performance in young ewes with high merit for rapid growth and muscle and fat accumulation. **animal** 12 (11); 2292-2299. |
| 2016 | Jorge Urrutia Morales, **César A Rosales Nieto**, Héctor R Vera Ávila, Eugenio Villagómez Amezcua Manjarres. Resumption of ovarian activity is modified by non-photoperiodic environmental cues in Criollo goats in tropical latitudes. Small Ruminant Research; 137, 9-16 |
| 2015 | **Rosales Nieto, C.A**., Ferguson, M.B., Thompson, H., Briegel, J.R., Macleay, C.A., Martin, G.B., Thompson, A.N. Relationships among puberty, muscle and fat, and liveweight gain during mating in young female sheep. Reproduction in Domestic Animals 50, 637-642. |
| 2014 | **C.A. Rosales Nieto**, M.B. Ferguson, J.R. Briegel, M.P. Hedger, G.B. Martin, A.N. Thompson. Relationships among body composition, circulating concentrations of leptin and follistatin, and the onset of puberty and fertility in young female sheep. Animal Reproduction Science 151; 148-156. |
| 2013 | **Rosales Nieto C.A.,** Ferguson M.B., Macleay C.A., Briegel J.R., Wood D.A., Martin G.B., Thompson A.N. Ewe lambs with higher breeding values for growth achieve higher reproductive performance when mated at age 8 months. Theriogenology 80: 427-435. |
| 2013 | **Rosales Nieto, CA**, Ferguson, MB, Macleay, CA, Briegel, JR, Martin, GB, Thompson, AN. Selection for superior growth advances the onset of puberty and increases reproductive performance in ewe lambs. Animal 7, 990-997 |