

Kelly C. S. Roballo

Edward Via College of Osteopathic Medicine
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Employment

Edward Via College of Osteopathic Medicine (VCOM) Blacksburg, VA, USA
ASSISTANT PROFESSOR DEPARTMENT OF BIOMEDICAL AFFAIRS AND RESEARCH
July 1st, 2021 – Present

University of Wyoming – School of Pharmacy Laramie, WY, USA
POST-DOCTORAL RESEARCH ASSOCIATE AND INSTRUCTOR
October 2017 – June 2021

Education

University of São Paulo – College of Veterinary Medicine Pirassununga, SP, Brazil
DOCTOR OF SCIENCE IN ANIMAL BIOSCIENCE
May 2015 – September 2017
Dissertation Title: Exosome communication in stem cell transdifferentiation in co-culture with neurons
Advisor: Dr. Carlos E. Ambrosio
Co-Advisor: Dr. Juliano Coelho da Silveira

DOCTOR OF VETERINARY MEDICINE
(Among the top 5 students in my year/class) February 2009 – February 2015

Research Experience and Training

University of Wyoming – School of Pharmacy Laramie, WY, USA
POST-DOCTORAL RESEARCH ASSOCIATE AND INSTRUCTOR
October 2017 – June 2021
Mentor: Dr. Jared Bushman

University of São Paulo – College of Veterinary Medicine Pirassununga, SP, Brazil
DOCTORAL CANDIDATE
May 2015 – September 2017
Dissertation Title: Exosome communication in stem cell transdifferentiation in co-culture with neurons
Funded by: State of São Paulo Research Support Foundation (FAPESP)
Advisor: Dr. Carlos E. Ambrosio
Co-Advisor: Dr. Juliano Coelho da Silveira

Krefting Research Centre, Institute of Medicine, Goteborg University Gothenburg, Sweden
SHORT TERM TRAINING
June 2016
Funded by: State of São Paulo Research Support Foundation (FAPESP)
Mentors: Cecilia Lässe and Aleksander Cvjetkovic

University of São Paulo – College of Veterinary Medicine Pirassununga, SP, Brazil

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SCIENTIFIC INITIATION SCHOLAR

June 2013 – May 2014

Project Title: Characterization of cells from choroid plexus using swine as an animal model

Funded by: State of São Paulo Research Support Foundation (FAPESP)

Advisor: Dr. Carlos Eduardo Ambrosio

University of Illinois – Department of Animal Science

Urbana-Champaign, IL, USA

STUDENT INTERN

March 2012 – February 2013

Funded by: National Council for Scientific and Technological Development (CNPq)

Advisor: Dr. Matthew Wheeler

University of São Paulo – College of Veterinary Medicine

Pirassununga, SP, Brazil

SCIENTIFIC INITIATION SCHOLAR

June 2010 – May 2011

Project Title: Understanding the embryology of pharyngeal arches in carnivores

Funded by: State of São Paulo Research Support Foundation (FAPESP)

Advisor: Dr. Carlos Eduardo Ambrosio

Awards and Funding

Honors

- ❖ University of São Paulo – College of Veterinary Medicine. Awarded an honorable mention as the best PhD Project in 2016.

Funding

Submitted and funded

- ❖ Travel grant- 8th Annual International Symposium on Regenerative Rehabilitation, \$1,200. 2019
- ❖ Travel grant- University of Wyoming, for the expansion of collaboration at University of São Paulo, \$2,000. 2018
- ❖ Travel grant- International Congress on Animal Reproduction, €1,000. 2016
- ❖ Ph.D. fellowship from State of São Paulo Research Support Foundation, ~R\$74,800. 2015
- ❖ Travel grant- Pro-International Scholarship from University of Sao Paulo, \$2000. 2013
- ❖ Scientific Initiation fellowship from State of São Paulo Research Support Foundation, ~R\$13,000. 2013
- ❖ Scientific Initiation fellowship from State of São Paulo Research Support Foundation, ~R\$13,000. 2010

Submitted or pending

- ❖ R15, NIH. PI: **Roballo KCS**, \$ 400,000. 2022
- ❖ R15, NIH. PI: **Roballo KCS**, \$ 400,000. 2021
- ❖ Department of Defense, Reconstructive Transplant Research Program (RTRP), Investigator-Initiated Research Award (IIRA). PI: **Roballo KCS**, \$1,000,000. 2021
- ❖ Commonwealth Health Research Board Concept Paper. PI: **Roballo KCS**, \$100,000. 2021
- ❖ Travel grant- 9th Annual International Symposium on Regenerative Rehabilitation, \$1,200. 2021

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- ❖ QIAGEN RNA-seq Grant. PI: **Roballo KCS**, \$20,000. 2021
- ❖ Department of Defense, Peer Reviewed Medical Research Program (PRMRP), Discovery Award. PI: **Roballo KCS**, \$200,000. 2021

- ❖ Paralyzed Veterans of America Research Foundation, Post doc Fellow. PI: **Roballo KCS**, \$50,000. 2020
- ❖ Department of Defense, Peer Reviewed Medical Research Program (PRMRP), Discovery Award. PI: **Roballo KCS**, \$200,000. 2020
- ❖ R03, NIH. Principal personnel: **Roballo KCS**, \$100,000. 2020

- ❖ Department of Defense, Peer Reviewed Medical Research Program (PRMRP), Discovery Award. PI: **Roballo KCS**, \$200,000. 2019
- ❖ Life Sciences Research Foundation, PI: **Roballo KCS**, \$186,000. 2019
- ❖ Graduate Woman in Science. PI: **Roballo KCS**, \$10,000. 2019

Invited talks

WebEVTalk

INVITED LECTURER

International

2020

Neurons-derived extracellular vesicles promote neural differentiation of ADSCs: a model to prevent peripheral nerve degeneration, delivered via Zoom

UNIFEOB – College of Biology Science

INVITED LECTURER

São João da Boa Vista, SP, Brazil

2017

Central nervous system biology

Teaching Experience

Edward Via College of Osteopathic Medicine (VCOM)

ASSISTANT PROFESSOR

Blacksburg, VA, USA

July 2021 – Present

Physiology (Osteopathic Medical Students (OMS) I and II – Systems Blocks), and Neuroscience and Physiology (Master of Arts in Biomedical Sciences, VCOM-Bluefield College)

University of São Paulo – College of Veterinary Medicine

INVITED LECTURER

São Paulo, SP, Brazil

May 2020

Stem cell and extracellular vesicles topics, delivered via Zoom

University of Wyoming – School of Pharmacy

INSTRUCTOR

Laramie, WY, USA

Oct 2017 – June 2021

Instruct the on-line Foundational Pathophysiology (An Introduction to the Study of Human Disease) classes (PHCY 3450) for pharmacy and nursing students. It is a 4-credit hour course of 52 (50-minute) instructional periods which I teach during all academic periods (fall, spring, and summer).

University of São Paulo – College of Veterinary Medicine

TEACHING ASSISTANT

Pirassununga, SP, Brazil

May 2015 – June 2017

Teaching assistant and Instructor at the Veterinary Hospital as part of the Program of Improvement of Teaching (Veterinary Medicine, students) for:

- *Applied Anatomy (July – December 2016)*
- *Animal Anatomy (May 2015- September 2017)*
- *Sustainability and Agribusiness (February – June 2017)*

Mentorship Experience

Edward Via College of Osteopathic Medicine (VCOM)

MASON YOUNT – OMS-II

ALEXANDRA MORGAN – OMS-II

ALEKHYA PERURI – OMS-II

Blacksburg, VA, USA

August 2021 – Present

August 2021 – Present

August 2021 – Present

University of Wyoming – School of Pharmacy

Laramie, WY, USA

DANIEL BURNS – PhD student

2019 – 2021

Scientific accomplishments and outcomes: published 2 papers and 2 conference abstracts.

OSIMANJIANG WUPU – PhD candidate

2017 – 2021

Scientific accomplishments and outcomes: published 2 papers and 2 conference abstracts.

TANASEM MUNA – Master’s candidate

2018 – 2021

Scientific accomplishments and outcomes: published 1 conference abstracts.

HUONG PHAM – PharmD candidate

2018 – 2021

Scientific accomplishments and outcomes: published 1 paper and 1 conference abstract, current in school rotation for her Pharmacy degree.

MICHELE KILPATRICK – Undergraduate

2018 – 2020

Scientific accomplishments and outcomes: published 2 conference abstracts, now is applying for master’s degree in Pathology at University of Wyoming.

KAITLYN VAP – Undergraduate

2018 – 2020

Scientific accomplishments and outcomes: published 1 conference abstract, now is applying for Medical School.

CARSON ASHER – Undergraduate

2018 – 2020

Scientific accomplishments and outcomes: published 2 conference abstracts, now is applying for Medical School.

SUBASH DHUGANA – PhD candidate

2017 – 2018

Scientific accomplishments and outcomes: published 1 paper, now is working as a research assistant at University of California LA.

HAYDEN TRUE – Undergraduate

2017 – 2018

Scientific accomplishments and outcomes: published 1 conference abstract, now at Medical School (WWAMI) at University of Wyoming.

University of São Paulo – College of Veterinary Medicine Pirassununga, SP, Brazil
VITORIA M. PEREIRA – Undergraduate 2015 – 2017
Scientific accomplishments and outcomes: published 2 papers, still working the lab and now a PhD candidate at University of Wyoming.

LETICIA R. PADOVEZE – Undergraduate 2015 – 2017
Scientific accomplishments and outcomes: studied abroad at University of Illinois with my former advisor Dr. Wheeler, published 1 conference abstract, now is practicing Veterinary Medicine.

FELIPE ROS – Undergraduate 2016 – 2017
Scientific accomplishments and outcomes: published 1 article, now master's degree candidate at University of São Paulo.

MARIA GABRIELA – Undergraduate 2016 – 2017
Scientific accomplishments and outcomes: published 1 conference abstract, now is practicing Veterinary Medicine.

PATRICIA L. N. DA CUNHA – Undergraduate 2016 – 2017
Scientific accomplishments and outcomes: published 1 conference abstract, now is practicing Veterinary Medicine.

BÁRBARA ROSSI DE SOUSA – Undergraduate 2015 – 2016
Scientific accomplishments and outcomes: published 1 conference abstract, now is practicing Veterinary Medicine.

Academic service

Committee Membership

University of São Paulo São Paulo, SP, Brazil
OUTSIDE COMMITTEE MEMBER OF DISSERTATION PRELIM December 08, 2021
Title: Influência dos exossomos derivados de oligodendrócitos na terapia celular da encefalomielite autoimune experimental
Candidate: Sarah Ingrid Pinto Santos

University of São Paulo São Paulo, SP, Brazil
OUTSIDE COMMITTEE MEMBER OF DISSERTATION PRELIM December 02, 2021
Title: Edição dos genes CSN2 (beta-caseína) e LGB (beta-lactoglobulina) por CRISPR/Cas9 em células de Bos taurus como modelo de produção de proteínas recombinantes
Candidate: Clésio Gomes Mariano Júnior

University of São Paulo São Paulo, SP, Brazil
OUTSIDE COMMITTEE MEMBER OF DISSERTATION DEFENSE December 17, 2020
Thesis Title: In vitro cellular reprogramming into pluripotency (generation of iPS cells) in the porcine model using non-transgenic and non-invasive methodology.
Candidate: Kaiana Recchia

University of São Paulo

OUTSIDE COMMITTEE MEMBER OF DISSERTATION DEFENSE

Thesis Title: of the formation of trophoblastic giant cells in bovine placenta
Candidate: Lucas Luiz Rocha Rosestolato

São Paulo, SP, Brazil

July 21, 2020

University of São Paulo

OUTSIDE COMMITTEE MEMBER OF DISSERTATION DEFENSE

Thesis Title: Recellularization of blood vessel-derived biomaterials from the allantoichorionic surface of the bovine placenta
Candidate: Amanda Saragó

São Paulo, SP, Brazil

July 21, 2020

State University of Maranhão

OUTSIDE COMMITTEE MEMBER OF DISSERTATION DEFENSE

Thesis Title: Isolation and characterization of spinal cord neuroprogenitors cells of canine fetus
Candidate: Sarah Ingrid Pinto Santos

São Luiz, MA, Brazil

January 6, 2020

Professional Society Membership

500 Women Scientists

MEMBER

2020 – Present

TERMIS

MEMBER

2017 – Present

International Society for Extracellular Vesicles

MEMBER

2019 – Present

Editorial Activities

Life: Special Issue "Cell Culture and Genome Modification Technologies: from Biology to Biomedical Applications"

GUEST EDITOR

September 2021 – Present

Journal of Extracellular Vesicles (JEV)

EDITORIAL BOARD

November 2020 – Present

Journal of Tissue Engineering and Regenerative Medicine

PEER REVIEWER OF MANUSCRIPTS

July 2020 – Present

Animal Reproduction

PEER REVIEWER OF MANUSCRIPTS

March 2020 – Present

Microscopy Research and Technique

PEER REVIEWER OF MANUSCRIPTS

July 2019 – Present

CV - Kelly C. Santos Roballo

Anatomia, Histologia, Embriologia

PEER REVIEWER OF MANUSCRIPTS

September 2017 – Present

PLOS ONE Journal

PEER REVIEWER OF MANUSCRIPTS

May 2016 – Present

Pesquisa Veterinária Brasileira

PEER REVIEWER OF MANUSCRIPTS

September 2015 – Present

Acta Cirurgica Brasileira

PEER REVIEWER OF MANUSCRIPTS

September 2015 – Present

Leadership, Volunteering, and Community Outreach

The Social Scientist

VOLUNTEER

October 2020 – Present

Meet with Master and PhD students to share the experiences I have had as a scientist and the opportunities available to those who pursue a future in science after graduation.

Skype a Scientist

GUEST LECTURER

February 2020 – Present

Entrepreneurship Action Us (ENACTUS)

ALUMNI MEMBER

Pirassununga, SP, Brazil

June 2014 – Present

PRESIDENT/CHAPTER FOUNDER

March 2013 – June 2014

Veterinary Junior Company of Pirassununga (EMVEP)

EXECUTIVE PRESIDENT/FOUNDER

Pirassununga, SP, Brazil

July 2009 – December 2011

Career Development: Certifications, Workshops and Short-term courses

Certifications

- ❖ Establishing Credibility as a Speaker (30min). 2019
- ❖ Diversity, Equity & Inclusion Certification Program (in progress). 2019
- ❖ Aseptic Surgery, Lab Animal Research, Basic Biosafety Training, Biosafety Complete Training Series, Large animals Research. 2017-2019

Workshops

- ❖ Introductory and Intermediate course in 3D Printers (Prusas and Ultimakers). 2020
- ❖ Grant writer's workshop (8hrs). 2019
- ❖ Teaching and Learning- Creating Rubrics for Assessment (1h30 min). 2018
- ❖ Teaching and Learning- session on Small Teaching (1h30min). 2018
- ❖ Teaching and Technology- WyoCourses Rapid Course Design Workshop (2h). 2018
- ❖ Teaching and Technology- Learning with Games (3hrs). 2018

Short-term courses

- ❖ English I Language and Culture Immersion Program at Faculty of Science Technology and Education (FATEC); Americana, Brazil. 2011
- ❖ Wild Animal Anesthesiology. Brazilian Association of Wild Animal Veterinarians (ABRAVAS); Brazil.2009

Patents

Non-Provisional patent application

- ❖ Application for Letters Patent in the United States was filed on August 30, 2020, under Serial No. 62/884,618.

List of Publications

Peer Reviewed Publications (*corresponding author)

1. Bittner, G.D., Bushman, J.S., Ghergherehchi, C.L. et al. Typical and atypical properties of peripheral nerve allografts enable novel strategies to repair segmental-loss injuries. *J Neuroinflammation* 19, 60 (2022).
2. Bittner G; Bushman JS; Ghergherehchi CL; **Roballo KCS**; Shore JTs; Smith TA. Review: Typical and Atypical Properties of Peripheral Nerve Allografts Enable Novel Strategies to Repair Segmental-loss Injuries. Accepted at *Journal of Neuroinflammation*. December 2021.
3. Oliveira VC, **Roballo KCS**, Mariano Junior CG, Santos SPI, Meirelles FV, Bressan FF, Chiaratti MR, Tucker E, Davis E, Concordet JP, Ambrósio CE. HEK293T Cells with TFAM Disruption by CRISPR-Cas9 as a Model for Mitochondrial Regulation. *Life* 2022, 12, 22.
4. **Roballo KCS**, Jason P. Gigley, Tyler A. Smith, George D. Bittner, Jared S. Bushman. *Review: Functional and Immunological Peculiarities of Peripheral Nerve Allografts. Neural Regeneration Research* 17 (4):721-727.
5. Oliveira VC, Junior CGM, Belizário JE, Krieger JE, Bressan FF, **Roballo KCS**; Fantinato-Neto P, Meirelles FV, Chiaratti MR, Concordet JP, Ambrósio CE. Characterization of post-edited cells modified in the TFAM gene by CRISPR/Cas9 technology in bovine model. *PlosOne*, 2020, June.
6. Maki AJ, Rabel RAC, Rubessa M, Ercolin ACM, **Roballo KCS**, Cooper JJ, Wheeler MB. Autologous Adipose-Derived Stem Cells, Platelet-Rich Plasma, and Fibrin Enhance Healing of Mandibular Bone Defects in Swine. *International journal of regenerative medicine*, 2020, Volume 3(2): 2-9.
7. Osimanjiang W, **Roballo KCS**, Ito M, Antonopoulos A, Dell A, Haslam SM, Bushman J. Analysis of N- and O-glycans: Differential Glycan Expression After Rat Spinal Cord Injury. *J Neurotrauma*, 2020, Apr 22.
8. Jones M, Nankervis B, **Roballo KCS**, Pham H, Bushman J, Coeshott C. A comparison of automated perfusion- and manual diffusion-based human regulatory T cell expansion and functionality using a soluble activator complex. *Cell transplantation*, 2020.

9. Casals JB, Pieri NCG, **Roballo KCS***, Bressan FF, Favaron F, Martins DS, Ambrosio CE. Pluripotent stem cells proliferation is associated with placentation in dogs. *Anim Reprod*, 2020.
10. **Roballo KCS**, Burns D, Ghnenis AB, Osimanjiang W, Bushman JB. Long-term regeneration analysis after peroneal nerve injury using sheep as animal model. *European Journal of Neuroscience*, 2020.
11. Pereira VM, **Roballo KCS**, Silva ANE, Cordeiro JF, Bressan TF, Muller AF, Ercolin ACM, Cirimbelli CF, Soares Hage MCFN, Carregaro AB and Ambrósio CE. The use of stem cells in reducing recovery time of distal limb fracture in seriema (*Cariama Cristata*). *Journal of Avian Medicine and Surgery*, 2020.
12. **Roballo KCS**, da Silveira JC, Bressan FF, de Souza AF, Pereira VM, Porras JEP, Rós FA, Pulz LH, Strefezzi RF, Martins DDS, Meirelles FV, Ambrósio CE. Neurons-derived extracellular vesicles promote neural differentiation of ADSCs: a model to prevent peripheral nerve degeneration. *Sci Rep*. 2019, 1;9(1):11213.
13. **Roballo KCS**, Dhungana S, Jiang Z, Oakey J, Bushman JS. Localized delivery of immunosuppressive regulatory T cells to peripheral nerve allografts promotes regeneration of branched segmental defects. *Biomaterials*. 2019, 209:1-9.
14. de Oliveira VC, Moreira GSA, Bressan FF, Gomes Mariano Junior C, **Roballo KCS**, Charpentier M, Concordet JP, Meirelles FV, Ambrósio CE. Edition of TFAM gene by CRISPR/Cas9 technology in bovine model. *PlosOne*. 2019, 7;14 (3):e0213376.
15. Schwarzbach SV, Melo CF, Xavier PLP, **Roballo KCS**, Cordeiro YG, Ambrósio CE, Fukumasu H, Carregaro AB Morphine, but not methadone, inhibits microsomal prostaglandin E synthase-1 and prostaglandin-endoperoxide synthase 2 in lipopolysaccharide-stimulated horse synoviocytes. *Biochimie*. 2019, 11;160:28-33.
16. **Roballo KCS**, Souza AF, Lara VM, Pinheiro AO, Gomes IS, Karam RG, Martins DS, Machado LC, Ambrósio CE. Canine fetus immune system at late development. *Anim Reprod*, 2019, vol.16, n2, p.328-331.
17. **Roballo KCS**, Bushman J. Evaluation of the host immune response and functional recovery in peripheral nerve autografts and allografts. *Transpl Immunol*. 2019, 5. pii: S0966-3274(18)30123-0.
18. Pieri NCG, Mançanares ACF, de Souza AF, Fernandes H, Diaza AMG, Bressan FF, **Roballo KCS**, Casals JB, Binelli M, Ambrósio CE, Dos Santos Martins D. Xenotransplantation of canine spermatogonial stem cells (cSSCs) regulated by FSH promotes spermatogenesis in infertile mice. *Stem Cell Res Ther*. 2019, 20;10(1):135.
19. Zomer HD, **Roballo KCS**, Lessa TB, Bressan FF, Gonçalves NN, Meirelles FV, Trentin AG, Ambrósio CE. Distinct features of rabbit and human adipose derived mesenchymal stem cells: implications for biotechnology and translational research. *Stem Cells Cloning*. 2018, 23;11:43-54.
20. de Souza AF, Pieri NCG, **Roballo KCS**, Bressan FF, Casals JB, Ambrósio CE, Percin F, Martins DS. Dynamics of male canine germ cell development. *Plos One*. 2018, 28;13(2):e0193026.
21. Gonçalves NJN, Bressan FF, **Roballo KCS**, Meirelles FV, Xavier PLP, Fukumasu H, Williams C, Breen M, Koh S, Sper R, Piedrahita J, Ambrósio CE. Generation of LIF-independent induced pluripotent stem cell from canine fetal fibroblasts. *Theriogenology*. 2017, 1;92:75-82.

22. Machado LC, **Roballo KCS**, Cury FS, Ambrósio CE. Female reproductive system morphology of crabeating fox (*Cerdocyon thous*) and cryopreservation of genetic material for animal germplasm bank enrichment. *Anat Histol Embryol.* 2017, 46(6):539-546. /
23. Gomes IS, Oliveira VC, Pinheiro AO, **Roballo KCS***, Araujo JSM, Veronezi JC, Martins DS and Ambrósio CE. Bone marrow stem cell applied in the canine veterinary clinics. *Pesq. Vet. Bras.* 2017, 37(10):1139-1145.
24. Oliveira NA, **Roballo KCS**, Lisboa Neto AFS, Sandini TM, Santos AC, Martins DS, e Ambrosio CE. Bioimpressão e produção de mini-órgãos com células tronco. *Pesq. Vet. Bras.* 2017, 37(9):1032-1039. [Portuguese].
25. Mazzarella R, Garnica TK, **Roballo KCS*** & Ambrosio C.E. Células-tronco derivadas do epitélio olfatório: perspectivas terapêuticas na medicina veterinária. *Pesq. Vet. Bras.* 2016, 36(8):787-792 [Portuguese].
26. Pieri N, Souza AF, Mançaneres A, **Roballo KCS**, Casals JB, Ambrosio CE, Martins DS. Immunolocalization of proteins in the spermatogenesis process of canine. *Reprod Domest Anim.* 2017, 52 (2):170-176.
27. **Roballo KCS**, Gonçalves NJ, Pieri NC, Souza AF, Andrade AF, Ambrósio CE. Regulation of neural stem cells by choroid plexus cells population. *Neuroscience letters.* 2016, 28;626:35-41.
28. Morini AC, Pieri N, **Roballo KCS**, Martins DS, Ambrósio C, Morini Junior JC, Favaron PO, Minervino A, Pereira F, Miglino MA. Buffalo (*Bubalus bubali*) late embryo and foetus development. A morphologic analyses. *Reprod Dom Anim.* 2016, 51(4):509-14.
29. Ercolin AC, **Roballo KCS**, Casals JB, Pieri NC, Souza AF, Barreto R da S, Bressan FF, Feitosa ML, Miglino MA, Meirelles FV, Ambrósio CE. Rabbit olfactory stem cells: isolation protocol and characterization. *Acta Cir Bras.* 2016, 31(1):59-66.
30. Pieri N, Souza AF, Casals JB, **Roballo KCS**, Ambrósio CE, Martins DS. Comparative Development of Embryonic Age by Organogenesis in Domestic Dogs and Cats. *Reprod Dom Anim.* 2015,50, 625–631.
31. Godoy Pieri NC, da Silva Santos PR, **Roballo KCS**, Flamini MA, Barbeito CG, Ambrosio CE, Miglino MA, Dos Santos Martins D. Seasonal variations cause morphological changes and altered spermatogenesis in the testes of viscacha (*Lagostomus maximus*). *Anim Reprod Sci.* 2014,149(3-4):316-24.
32. **Roballo KCS**, Ercolin ACM, Casals JB, Pieri NCG, Barreto RSN, Illera MJ, Martins DS, Miglino MA, Ambrósio CE. Domestic Carnivore's Development: Detection of Oct-4, A Pluripotency Marker, in Pharyngeal Arches. *Reprod Domest Anim.* 2013, 48(3):e41-e43.
33. **Roballo KCS**, Ercolin ACM, Bionaz M, Ambrosio CE, Wheeler MB. Porcine adipose-derived stem cells are induced toward neurogenic lineages by cell-to-cell interactions but not by soluble factors released by neurons isolated from adult and fetal brain. *Reproduction Fertility and Development.* 2012, 25(1):289.
34. Abreu DK, Rodrigues EAF, Monteiro JM, Franciulli AL, Costola-Souza C, **Roballo KCS**, Ambrósio CE, Miglino MA. Estudo microscópico e macroscópico, com enfoque radiográfico e de alizarina, no desenvolvimento embrionário e fetal de gatos domésticos (*Felis catus*) em diferentes idades gestacionais. *Pesq Vet Bras.* 2011, 31(Supl.1):57-66. [Portuguese].
35. Casals JB; Pieri NC, Feitose ML, Ercolin AC, **Roballo KCS**, Barreto RS, Bressan FF, Martins DS, Miglino MA, Ambrósio CE. The Use of Animal Models for Stroke Research: A Review. *Comp Med.* 2011, 61(4):305-313.

36. Fadel L, Viana BR, Feitosa ML, Ercolin AC, **Roballo KCS**, Casals JB, Pieri NC, Meirelles FV, Martins Ddos S, Miglino MA, Ambrósio CE. Protocols for obtainment and isolation of two mesenchymal stem cell sources in sheep. *Acta Cir Bras.* 2011,26(4):267-273.

Publications Under Review

1. Pereira VM, **Roballo KCS**, Arantes J, Mizobe T, Padovezze L, Dória RG, Silva L and Ambrosio CE. Acute inflammation stimulates the function of adipose derived stem cells: a possible pathway to follow in future of cellular therapy. Under Review at Equine Veterinary Journal 2021

Book Chapters

1. **Roballo KCS**, Pereira VM, Ambrosio CE. Stem cell therapy in wild animals. Portuguese: Treaty of wild animals veterinary medicine, 3^a Ed.2022.
2. **Roballo KCS**, Ambrosio CE, and Silveira JC. Cap.: Protocol to study the role of extracellular vesicles during induced stem cell differentiation. Springer Nature Protocols. Accepted, 2020 (Ms. No. SPRO-D-20-00054)
3. Lara VM#, **Roballo KCS**#, Gotardo AT, Ambrósio CE. Cap.: Flow-cytometry to evaluate potential developmental toxicants in the embryonic stem cell. Book: Teratogenicity Testing. Series Volume 1797. 644 pages. Series ISSN 1064-3745. 2018. #equal contribution.

Abstracts Published in Conferences

1. **Roballo KCS**, Dhugana S, Pham H, Burns D, Zhongliang J, Oakey J, Bushman J. Localized immune suppression achieved with drug and cell based strategies allow for full regeneration equivalent to nerve grafts in critical sized defects. Autumn Immunology Conference, Chicago IL. November 16-19th, 2018. (Poster and Oral presentation).
2. Pieri NCG, Mançanares AFC, Souza AF, **Roballo KCS**, Casals JB, Ambrosio CE and Martins DS. Immunolocalization of Proteins in the Spermatogenesis Process of Canine. International Symposium on Canine and Feline Reproduction, 2016, Paris, France. *Short Communication*
3. Ramos K L, Simoes LQ, **Roballo KCS**, Viana BR, Hage MCFNS, Sousa RLM, Grigoletto R, Aguiar ML, Ribeiro MH, Doria RGS. O papel do exame ultrassonográfico no acompanhamento de abscesso cervical em equino. [The ultrasonography in the cervical abscess monitoring in equines.] Resumos da XIV Conferência Anual da Associação Brasileira dos Médicos Veterinários de Equídeos (ABRAVEQ) 2013;1:200-201. [Portuguese].
4. **Roballo KCS**, Ambrósio CE, Bionaz M, Wheeler MB. Porcine adipose-derived stem cells are induced toward neurogenic lineages by cell-to-cell interactions but not by soluble factors released by neurons isolated from adult and fetal brain. In: 39th IETS Annual Conference, 2013, Hannover. 39th IETS Annual Conference, 2012.
5. **Roballo KCS**, Ercolin ACM, Casals JB, Moro MEG, Martins DS, Carvalho AF, Mançanares CF, Rosa RA, Miglino MA, Ambrósio CE. Análise macroscópica do aparelho reprodutor masculino do ouriço-cacheiro (Coendou villosus). In: XII Congresso ABRAVAS, 2009, Aguas de Lindoia. Anais do XII Congresso ABRAVAS., 2009.

6. Ercolin ACM, **Roballo KCS**, Casals JB, Miglino MA, Martins DS, Moro MEG, Ambrósio CE. Análise macroscópica do aparelho reprodutor masculino de *Seriema* (*Cariama cristata*). In: XII Congresso ABRAVAS, 2009, Águas de Lindóia. Anais do XII Congresso ABRAVAS, 2009.

Presentations (Oral and Poster)

1. **Roballo KCS**, Bushman J. Evaluation of the host immune response and functional recovery in peripheral nerve autografts and allografts. FRNG, Fort Collins CO, 2019. (Poster)
2. Pham HL, **Roballo KCS**, J Bushman. Cryopreserved human regulatory T cells (hTregs) maintain their viability and immune suppression functionality as a therapeutic alternative to fresh hTregs. FRNG, Fort Collins CO, 2019. (Poster)
3. Osimanjiang W, **Roballo KCS**, Ito M, Antonopoulos A, Dell A, Haslam SM, Bushman JS. Analysis of n- and o-glycans: differential glycan expression after rat spinal cord injury. FRNG, Fort Collins CO, 2019. (Poster)
4. Asher C, **Roballo KCS**, Ghnenis AB, Burns D, Osimanjiang W, Bushman J. Long term regeneration analysis after peroneal nerve injury using sheep as animal model. FRNG, Fort Collins CO, 2019. (Poster)
5. Kilpatrick M, **Roballo KCS**, Vap K, Jiang Z, Oakey J, Bushman J. Viability of regulatory t-cells in peripheral nerve grafts after microinjection delivery. FRNG, Fort Collins CO, 2019. (Poster)
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