

Líneas de investigación	Artículos Asociados a la línea (2013-2017)
<p>Biología Celular y Molecular de la Reproducción</p>	<ol style="list-style-type: none"> 1. Águila L, Felmer R, Arias ME, Navarrete F, Martin-Hidalgo D, Lee HC, Visconti P, Fissore R. Defective sperm head decondensation undermines the success of ICSI in the bovine. <i>Reproduction</i>. 2017 Sep; 154(3):207-218. doi: 10.1530/REP-17-0270. 2. Águila L, Zambrano F, Arias ME, Felmer R. Sperm capacitation pretreatment positively impacts bovine intracytoplasmic sperm injection. <i>Mol Reprod Dev</i>. 2017 Jul; 84(7):649-659. doi: 10.1002/mrd.22834. 3. Loren P, Sánchez R, Arias ME, Felmer R, Risopatrón J, Cheuquemán C. Melatonin Scavenger Properties against Oxidative and Nitrosative Stress: Impact on Gamete Handling and In Vitro Embryo Production in Humans and Other Mammals. <i>Int J Mol Sci</i>. 2017 Jun 14; 18(6). pii: E1119. doi: 10.3390/ijms18061119. 4. Arias ME, Andara K, Briones E, Felmer R. Bovine sperm separation by Swim-up and density gradients (Percoll and BoviPure): Effect on sperm quality, function and gene expression. <i>Reprod Biol</i>. 2017 Jun; 17(2):126-132. doi: 10.1016/j.repbio.2017.03.002 5. Zambrano F, Aguilá L, Arias ME, Sanchez R, Felmer R. Effect of sperm pretreatment with glutathione and membrane destabilizing agents lysolecithin and Triton X-100, on the efficiency of bovine intracytoplasmic sperm injection. <i>Reprod Domest Anim</i>. 2017 Apr; 52(2):305-311. doi: 10.1111/rda.12906. 6. Arias ME, Sánchez-Villalba E, Delgado A, Felmer R. Effect of transfection and co-incubation of bovine sperm with exogenous DNA on sperm quality and functional parameters for its use in sperm-mediated gene transfer. <i>Zygote</i>. 2017 Feb; 25(1):85-97. doi: 10.1017/S096719941600037X 7. Contreras P, Ulloa P, Merino O, Valdebenito I, Figueroa E, Fariás J, Risopatrón J. 2017. Effect of short-term storage on sperm function in Patagonia blenny (<i>Eleginops maclovinus</i>) sperm. <i>Aquaculture</i>, 481: 58-63. Impact Factor: 2.570. DOI: 10.1016/j.aquaculture.2017.08.022. 8. Díaz R, Torres MA, Paz E, Quiñones J, Bravo S, Fariás JG, Sepúlveda N. 2017. Dietary inclusion of fish oil changes the semen lipid composition but does not improve the post-thaw semen quality of ram spermatozoa. <i>Animal Reproduction Science</i>. Impact Factor: 1.605. DOI: 10.1016/j.anireprosci.2017.05.002. 9. Fariás JG, Zepeda A, Castillo R., Figueroa E, Ademoyero OT, Pulgar VM. 2017. Chronic hypobaric hypoxia diminishes the expression of base excision repair OGG1 enzymes in spermatozoa. <i>Andrologia</i>. Impact Factor: 1.458. DOI: 10.1111/and.12876. 10. Durmoné, Figueroa E., Figueroa E., Cosson J., Lee-Estevez M., Ulloa-Rodríguez P., Valdebenito I, Fariás JG. 2017. Protein phosphorylation and ions effects on salmonid sperm motility activation. <i>Reviews in aquaculture</i>. Impact Factor: 4.618. DOI: 10.1111/raq.12198. 11. Ulloa-Rodríguez P, Figueroa E, Díaz R, Lee-Estevez M, Short S, Fariás JG. 2017. Mitochondria in teleost spermatozoa. <i>Mitochondrion</i>. Impact Factor: 3.704. DOI: 10.1016/j.mito.2017.01.001. 12. Risopatrón J, Merino O, Figueroa E, Cheuquemán C, Figueroa E, Sánchez R, Fariás J, Valdebenito I. 2017. Effect of the age of broodstockmales on sperm function during cold storage in the trout (<i>Oncorhynchus mykiss</i>). <i>Andrologia</i>. Impact Factor: 1.458. DOI: 10.1111/and.12857. 13. Valdebenito I, Cosson J, Contreras P, Sanchez JC, Oliveira RP, Risopatrón J, Fariás JG, Figueroa E. 2017. Spermatological research of experimentally farmed Patagonian blenny (<i>Eleginops maclovinus</i>) (Perciformes: Eleginopsidae) in Chile. <i>Aquaculture research</i>. Impact Factor: 1.461. DOI: 10.1111/are.13240 14. Merino, O. Figueroa, E. Cheuquemán, C. Valdebenito, I. Isachenko, V. Isachenko, E. Sánchez, R. Fariás, J. and Risopatrón, J. 2017. Short-term storage of salmonids semen in a sodium alginate-based extender. <i>Andrologia</i>. Impact Factor: 1.458. DOI: 10.1111/and.12661. 15. Uribe P., Villegas J.V., Boguen R., Treulen F., Sánchez R., Mallmann P., Isachenko V., Rahimi G., Isachenko E. (2017) Use of the fluorescent dye TMRM for mitochondrial membrane potential assessment in human spermatozoa. <i>Andrologia</i>. 2017 Jan 11. doi: 10.1111/and.12753.

16. Pamela Uribe, Christian Rojas, Juan Meriño, Fabiola Zambrano, Juana V Villegas, Favián Treulen, Rodrigo Boguen, Vladimir Isachenko, Evgenia Isachenko, Raúl Sánchez. Effect of incubation temperature after devitrification on quality parameters in human sperm cells. *Cryobiology*. Aceptado.
17. Parodi J, Guerra G, Cuevas M, Ramírez-Reveco A, Romero F. Effects of storage time on the motility, mortality and calcium levels of Atlantic salmon *Salmo salar* spermatozoa. *J Fish Biol.* 2017 Apr; 90(4):1506-1516. doi: 10.1111/jfb.13245.
18. Arias ME, Sánchez R, Felmer R. 2016. Effect of Anisomycin, a Protein Synthesis Inhibitor, on the In Vitro Developmental Potential, Ploidy and Embryo Quality of Bovine ICSI-Embryos. *Zygote*. Oct; 24(5):724-32. doi: 10.1017/S0967199416000034.
19. Bravo, S., Larama, G., Paz, E., Inostroza, K., Montaldo, H., Sepúlveda, N. 2016. Polymorphism of the GDF9 gene associated with litter size in Araucana creole sheep. *Animal Genetics*, 47, 286-391 DOI: 10.1111/age.12404 (ISI) (FI 1,779-Q1)
20. Cabrillana M.E., Uribe P., Villegas J.V., Álvarez J., Sánchez R. & Fornés M.W. (2016) Thiol oxidation by nitrosative stress: Cellular localization in human spermatozoa. *Syst Biol Reprod Med*. DOI: 10.1080/19396368.2016.1208782.
21. Cheuquemán C., Loren P., Arias M., Risopatrón J., Felmer R., Álvarez J., Mogas T., Sánchez R. Decrease of bovine in vitro embryo production (IVP) efficiency during winter season in a warm-summer Mediterranean climate. *Andrologia* 2016. Aceptado 04-Oct-2016. F.I: 1.441
22. Deppe M., Pezo F., Reyes-Díaz M., Risopatrón J. Criopreservación de Espermatozoides de Canino con Extracto de Hojas de Arándano (*Vacciniumcorymbosum* L.). *Int. J. Morphol.*, 2016, 34(2):653-659. F.I: 0,318
23. Diaz, R., Torres, M.A., Bravo, S., Sánchez, R., Sepúlveda, N. 2016. Determation of fatty acid profile in ram spermatozoa and seminal plasma. *Andrologia*, 48(6) 723-726 DOI: 10.1111/and.12506. (ISI) (FI 1,441-Q3)
24. Fariás, J.G., E.A. Herrera, C. Carrasco-Pozo, R. Sotomayor-Zárate, G. Cruz, P. Morales & R.L. Castillo. 2016. Pharmacological models and approaches for pathophysiological conditions associated with hypoxia and oxidative stress. *Pharmacology & Therapeutics*. Impact Factor: 11 DOI: 10.1016/j.pharmthera.2015.11.006 Quartile: 1
25. Farias JG, Carrasco-Pozo C., Sepúlveda N, Alvarez P, Quezada M, Quiñones J, Molina V and Castillo RL. 2016. Polyunsaturated fatty acid induces cardioprotection against ischemia-reperfusion through the inhibition of NF-kappaB and induction of Nrf2. *Experimental Biology and Medicine*. Impact Factor: 2.542 DOI: 10.1177/1535370216649263 Quartile: 2
26. Figueroa E., Valdebenito I., Merino O, Ubilla A., Risopatrón J. Farias J.G. Cryopreservation of Atlantic salmon *Salmo salar* sperm: effects on sperm physiology. *Journal of FishBiology* 2016, doi:10.1111/jfb.13052. F.I: 1,246.
27. Ricardo Hartley, Pablo aros, Eduardo Bustos-Obregon, Fernando Romero, Marcos Alvarenga, Alfredo Ramirez-Reveco. Reevaluating the sperm nuclear chromatin decondensation test by sodium thioglycolate of stallions spermatozoa. *Journal of Equine Veterinary Science*. 2016. P10-14.
28. Ignacio Jofré, Cesar Pezoa, Magdalena Cuevas, Erick Scheuermann, Irlan Almeida Freires, Pedro Luiz Rosalen, Severino Matias de Alencar, Fernando Romero. Antioxidant and vasodilator activities of *Ugni molinae* Turcz (Murtilla) on HUVEC-C cells and isolated aortic rings and mechanism modulatory in hypotension response. *Oxidative Medicine and Cellular Longevity*, 2016. P1-11.
29. Lee-Estevez M, Figueroa E, Cosson J, Short S, Valdebenito I, Ulloa PH and Fariás JG. 2016. Zebrafish as a useful model for immunologic research with potential applications in aquaculture. *Reviews in Aquaculture*. Impact Factor: 4.769 DOI: 10.1111/raq.12156 Quartile: 1
30. Letelier P., Riquelme I, Hernández AH, Guzmán N, Fariás JG, Roa JC. 2016. Circulating MicroRNAs as Biomarkers in Biliary Tract Cancer. *International Journal of Molecular Sciences*. Impact Factor: 3.257 DOI: 10.3390/ijms17050791. Quartile: 2
31. Loren P, Cheuquemán C, Sánchez E, Risopatrón J, Arias ME, Felmer R, Sánchez R. 2016. Effects of short-term exposure of cumulus-oocyte complex to 3-morpholinomine on in vitro embryo production and gene expression in bovine. *Reproduction in Domestic Animals*. *Reprod Domest Anim.* 2016; 51(6): 1010-1019.

32. Loren P, Cheuquemán C, Risopatrón J, Felmer R, Arias ME & Sánchez R. Modulation of Redox state by hydrogen peroxide in the stage of oocyte maturation: Effect on embryonic development in cattle. *Int. J. Morphol.* 34(2):431-435, 2016.
33. Loren P., Cheuquemán C., Sánchez E., Risopatrón J., Arias ME., Felmer R., Sánchez R. Effect of short- term exposure of cumulus-complex of 3- morpholinosydnonimine on in vitro embryo development and gene expression in cattle. *ReprodDomestAnim.* 2016 Sep 20. doi: 10.1111/rda.12788. F.I: 1,210
34. Magnotti, C. Vinicius, C. Lee-Estevez, M., Farias, JG. Valdebenito, I. and Figueroa, E. 2016. Cryopreservation and vitrification of fish semen: a review with special emphasis on marine species. *Reviews in Aquaculture.* Impact Factor: 4.769 DOI: 10.1111/raq.12145 Quartile: 1
35. Mansilla M.A., Merino O., Risopatrón J., Isachenko V., Isachenko E., Sánchez R. High temperature is essential for preserved human sperm function during the devitrification process. *Andrologia* 2016. doi: 10.1111/and.12406. F.I: 1,172
36. Mazzola, PG. Cavaco-Paulo, A. Farias, JG, Pereira, JF. 2016. Upstream and Downstream of Recombinants Biomolecules to Health Care Industry. *BioMed Research International.* Impact Factor: 2.134 DOI: 10.1155/2016/9374847. Quartile: 3
37. Merino, O. Figueroa, E. Cheuquemán, C. Valdebenito, I. Isachenko, V. Isachenko, E. Sánchez, R. Farías, J. and Risopatrón, J. 2016. Short-term storage of salmonids semen in a sodium alginate-based extender. *Andrologia.* Impact Factor: 1.441 DOI: 10.1111/and.12661. Quartile: 3
38. Schulz M., Risopatrón, J., Matus G., Pineda E., Rojas C., Isachenko V., Isachenko E., Sanchez R. Trehalose sustains a higher post-thaw sperm motility than sucrose in vitrified human sperm. *Andrologia* 2016. Aceptado 04-Oct-2016. F.I: 1.441
39. Torres, M., Díaz, R., Boguen, R., Martins, S., Ravagnan, G., Leal, D., Oliveira, M., Muro, B., Parra, B., Meirelles, F., Papa, F., Dell'Aqua, M., Alvarenga, M., Moretti, A., Sepúlveda, N., De Andrade, A. Novel flow cytometry analyses of boar sperm viability: Can the addition of whole sperm-rich fraction seminal plasma to frozen-thawed boar sperm affect it? *PLOS ONE* DOI:10.1371/journal.pone.0160988 August 16, 2016 (ISI) (FI: 3.057 Q1)
40. Ubilla A., Valdebenito I., Árias M.E., Risopatrón J. Viability and DNA fragmentation of rainbow trout embryos (*Oncorhynchus mykiss*) obtained from eggs stored at 4 °C. *Theriogenology* 2016, 85: 1499–1506. F.I: 1,798
41. Uribe P., Treulén F., Boguen R., Sánchez R., Villegas J.V. (2016) Nitrosative stress by peroxy nitrite impairs ATP production in human spermatozoa. *Andrologia* DOI: 10.1111/and.12615
42. Valdebenito I, Cosson J, Contreras P, Sanchez JC, Oliveira RP, Risopatron J, Farias JG, Figueroa E. 2016. Spermatological research of experimentally farmed Patagonian blenny (*Eleginops maclovinus*) (Perciformes: Eleginopsidae) in Chile. *Aquaculture research.* Impact Factor: 1.606 DOI: 10.1111/are.13240.
43. Zambrano F, Aguila L, Arias ME, Sánchez R, Felmer R. Improved preimplantation development of bovine ICSI embryos generated with spermatozoa pretreated with membrane-destabilizing agents lysolecithin and Triton X-100. *Theriogenology.* 2016; 86(6): 1489-97.
44. Zambrano F, Carrau T, Gärtner U, Seipp A, Taubert A, Felmer R, Sanchez R, Hermosilla C. Leukocytes cocubated with human sperm trigger classic neutrophil extracellular traps formation, reducing sperm motility. *Fertil Steril.* 2016 Jun 23. pii: S0015-0282(16)61302-X. doi: 10.1016/j.fertnstert.2016.06.005.
45. Águila L, Ruedlinger J, Mansilla K, Ordenes J, Salvatici R, de Campos RR, Romero F. Relaxant effects of a hydroalcoholic extract of *Ruta graveolens* on isolated rat tracheal rings. *Biological Research,* 2015. 48(28). P1-6.
46. Águila L, Arias ME, Vargas T, Zambrano F, Felmer R. 2015. Methyl- β -Cyclodextrin Improves Sperm Capacitation Status Assessed by Flow Cytometry Analysis and Zona Pellucida-Binding Ability of Frozen/Thawed Bovine Spermatozoa. *ReprodDomest Anim.* 50(6):931-8. doi: 10.1111/rda.12611.
47. Lilian F.S. Ambrósio, Fernando Romero, Antonio Miranda. New compound with spermicide properties designed from the polypeptide ATX isolated from the venom of the spider *Latrodectus mactans* of Chile. *Peptide.* 2015

48. Arias ME, Risopatrón J, Sánchez R, Felmer R. 2015. Intracytoplasmic sperm injection affects embryo developmental potential and gene expression in cattle. *Reproductive Biology*. 2015 Mar; 15(1):34-41. doi: 10.1016/j.repbio.2014.11.001.
49. Boguen R., Treulén F., Uribe P., Villegas J.V. (2015) Ability of *Escherichia coli* to produce hemolysis leads to a greater pathogenic effect on human sperm. *Fert & Steril* 103(5), 1155–1161, 2015. DOI: 10.1016/j.fertnstert.2015.01.044.
50. Bravo, S., Larama, G., Ortíz, M., Sepúlveda, N. 2015. Genetic differentiation between 'Araucano' creole and 'Hampshire Down' sheeps in Chile. *Chilean Journal of Agricultural Research*, 75(1)131-136 (ISI) (FI 0,637-Q3)
51. Bravo A., F. Treulen, P. Uribe, R. Boguen, R. Felmer & J. V. Villegas (2015) Effect of mitochondrial calcium uniporter blocking on human spermatozoa. *Andrologia* 47(6):662-8. DOI: 10.1111/and.12314.
52. Cheuquemán C, Loren P, Arias ME, Risopatrón J, Felmer R, Álvarez J, Mogas T, Sánchez R. 2015. Effects of short-term exposure of mature oocytes to sodium nitroprusside on in vitro embryo production and gene expression in bovine. *Theriogenology*. 84(8):1431-7. doi: 10.1016/j.theriogenology.2015.07.031.
53. Cheuquemán C, Arias ME, Risopatrón J, Felmer R, Alvarez, J, Mogas, T and Sánchez R. 2015. Supplementation of IVF medium with melatonin: effect on sperm functionality and in vitro produced bovine embryos. *Andrologia* 47: 604-615.
54. Cheuquemán C, Arias ME, Risopatrón J, Felmer R, Álvarez J, Mogas T, Sánchez R. Supplementation of IVF medium with melatonin: effect on sperm functionality and in vitro produced bovine embryos. *Andrologia* 2015 47(6):604-15. Jul 25. doi: 10.1111/and.12308. [Epub ahead of print] F.I: 1,172
55. Díaz R., Inostroza K., Risopatrón J., Sánchez R., Sepúlveda N. Identification of fatty acids in canine seminal plasma. *Andrologia*, 46 (2): 194-7. 2014 F.I: 1,172
56. Díaz R., Torres M.A., Bravo S., Sanchez R., Sepúlveda N. Determination of fatty acid profile in ram spermatozoa and seminal plasma. *Andrologia*. doi: 10.1111/and.12506, 2015.
57. Farías et al. 2015. Molecular aspects of breast cancer resistance to drugs (Review). *International Journal of Oncology* 47(2): 437-445. Impact Factor: 3.025 DOI: 10.3892/ijo.2015.3055 Quartile: 2 Editorial: Spandidos Publ Ltd, Greece ISSN: 1019-6439
58. Felmer R & Arias ME. 2015. Activation treatment of recipient oocytes affects the subsequent development and ploidy of bovine parthenogenetic and somatic cell nuclear transfer (SCNT) embryos. *Molecular Reproduction and Development*. 82: 441-449.
59. Figueroa, E., I. Valdebenito, A.B. Zepeda, C.A. Figueroa, K. Dumorné, R.L. Castillo & J.G. Farías. 2015. Effects of cryopreservation on mitochondria of fish spermatozoa. *Reviews in Aquaculture* (Early online). Impact Factor: 4.769 DOI: 10.1111/raq.12105 Quartile: 1
60. Figueroa E., Merino O., Risopatrón J., Isachenko V., Sánchez R., Effer B., Isachenko E., Farías J.G., Valdebenito I. Effect of seminal plasma on Atlantic salmon (*Salmosalar*) sperm vitrification. *Theriogenology* 2015, 15; 83(2):238-45 DOI: 10.1016/j.theriogenology.2014.09.015. F.I: 1,845
61. Herrera, E.A., J.G. Farías, G. Ebensperger, R.V. Reyes, A.J. Llanos & R.L. Castillo. 2015. Pharmacological approaches in either intermittent or permanent hypoxia: A tale of two exposures. *Pharmacological Research* 101: 94-101. Impact Factor: 4.408 DOI: 10.1016/j.phrs.2015.07.011 Quartile: 1 Editorial: Academic Press Ltd- Elsevier Science Ltd, England ISSN: 1043-6618
62. Isachenko E., Rahimi G., Mallmann P., Sanchez R., Isachenko V. Novel approaches to the cryopreservation of human spermatozoa: History and development of the spermatozoa vitrification technology. *J Reprod Stem Cell Biotechnol* 2:128-145, 2015.
63. Isachenko V., Isachenko E., Sanchez R., Dattena M., Mallmann P., Rahimi G. Cryopreservation of whole ovine ovaries with pedicles as a model for human: parameters of perfusion with simultaneous saturations by cryoprotectants. *Clin Lab*.61:415-420, 2015.
64. Merino O., Aguagüiña WE., Esponda P., Risopatrón J., Isachenko E., Isachenko V., Sánchez R. Protective effect of butylated hydroxytoluene on sperm function in human spermatozoa cryopreserved by vitrification technique. *Andrologia* 2015, 47(2):186-93. Feb 24. doi: 10.1111/and.12246. F.I: 1,172

65. Paz, E., Quiñonez, J., Bravo, S., Montaldo, H.H., Sepúlveda, N. 2015. Genotyping of BMPR1B, BMP15 and GDF9 genes in Chilean sheep breeds and association with prolificacy. *Animal Genetics*, 46: 98-99 (ISI) DOI: 10.1111/age.12254 (FI 1,779-Q1)
66. Pérez L, Arias ME, Sánchez R, and Felmer R. 2015. N-acetyl-L-cysteine (NAC) pretreatment protects bovine cryopreserved spermatozoa from ROS without compromising the in vitro developmental potential of ICSI embryos. *Andrologia*. 47: 1196-1201.
67. Pérez L, Arias ME, Sánchez R, Felmer R. 2015. N-acetyl-L-cysteine pre-treatment protects cryopreserved bovine spermatozoa from reactive oxygen species without compromising the in vitro developmental potential of intracytoplasmic sperm injection embryos. *Andrologia*. 47(10):1196-201. doi: 10.1111/and.12412.
68. Iván Rodríguez-Núñez, Fernando Romero; Marcelo González & Ruy R. Campos. *Biología del Desarrollo Vascular: Mecanismos en Condiciones Fisiológicas y Estrés Flujo*. Int. J. Morphology. 2015 p. 1349-1354.
69. Retamal J., Sanchez R., Brebi P. Infecciones de transmisión sexual silentes: la muestra de orina permite una adecuada detección. *Rev. Chil. Infectol.*32:283-288, 2015.
70. Treulen F., Uribe P., Boguen R., Villegas J.V. (2015) Mitochondrial outer membrane permeabilization increases reactive oxygen species production, decreases mean sperm velocity, but is not associated with DNA fragmentation in human sperm. *Mol Human Reprod* 22(2):83-92. DOI: 10.1093/molehr/gav067
71. Treulén F, Uribe P, Boguen R, Villegas J.V. (2015) Mitochondrial permeability transition increases reactive oxygen species production and induces DNA fragmentation in human spermatozoa. *Hum Reprod* 30(4): 767-776. DOI 10.1093/humrep/dev015.
72. Trigo P., Merino O., Figueroa E., Valdebenito I., Sánchez R., Risopatrón J. Effect of short-term semen storage in salmon (*Oncorhynchus mykiss*) on sperm functional parameters evaluated by flow cytometry. *Andrologia* 2015, 47(4):407-11, Apr 9. doi: 10.1111/and.12276. F.I: 1,172
73. Uribe P., Boguen R., Treulen F., Sanchez R., Villegas J.V. (2015) Peroxynitrite-mediated nitrosative stress decreases motility and mitochondrial membrane potential in human spermatozoa. *Mol Hum Reprod* 21(3): 237-243. DOI: 10.1093/molehr/gau107
74. Álvarez, P., L. Tapia, L.A. Mardones, J.C. Pedemonte, J.G. Farías & R.L. Castillo. 2014. Cellular mechanisms against ischemia reperfusion injury induced by the use of anesthetic pharmacological agents. *Chemico-Biological Interactions* 218: 89-98. Impact Factor: 2,577. DOI: 10.1016/j.cbi.2014.04.019. Quartile: 2. Editorial: Elsevier Ireland Ltd., Ireland. ISSN: 0009-2797
75. Ambrósio, L.F.S., Silva, T.M.T., Romero, F. and Miranda. *New Atx Fragments With Spermicidal Activity: Degradation and CD Studies*., SBBq, Brasil 2014.
76. Arias ME, Sánchez R, Risopatrón J, Pérez L, Felmer R. 2014. Effect of sperm pretreatment with sodium hydroxide and dithiothreitol on the efficiency of bovine intracytoplasmic sperm injection. *Reproduction, Fertility and Development*. 26(6):847-54. doi: 10.1071/RD13009.
77. Boguen R., Uribe P., Treulen F., Villegas JV (2013) Distinct isolates of uropathogenic *Escherichia coli* differentially affect human sperm parameters in vitro. *Andrologia*. doi: 10.1111/and.12167. F.I: 1,172
78. Bravo A., F. Treulen, P. Uribe, R. Boguen, R. Felmer & J. V. Villegas (2014) Effect of mitochondrial calcium uniporter blocking on human spermatozoa. *Andrologia*. doi: 10.1111/and.12314. F.I: 1,172
79. Brebi P., Hoffstetter R., Andana A., Ili CG., Saavedra K., Viscarra T., Retamal J., Sanchez R., Roa JC. Evaluation of ZAR1 and SFRP4 methylation status as potential biomarkers for diagnosis in cervical cancer: exploratory study phase I. *Biomarkers*. 19:181-188, 2014.
80. Cabrera P., Sánchez R., Risopatrón J. Selección espermática en semen congelado/descongelado de equino: evaluación de las membranas plasmática, acrosomal y potencial de membrana mitocondrial. *Int J Morphol*. 2014. 328 (2): 725-731. 2014. F.I: 0,2
81. Castillo, R.L., C. Arias & J.G. Farías. 2014. Omega 3 chronic supplementation attenuates myocardial ischaemia-reperfusion injury through reinforcement of antioxidant defense system in rats. *Cell Biochemistry and Function* 32(3): 274-281. Impact Factor: 2,005. DOI: 10.1002/cbf.3012. Quartile: 3. Editorial: Wiley-Blackwell, USA. ISSN: 0263-6484

82. Castillo, R.L., J.G. Farías, E.A. Herrera, P.I. Alvarez, S.E. Short, L. Tapia, R. Carrasco & R. Sotomayor-Zarate. 2014. Effects of chronic intermittent hypoxia and polyunsaturated fatty acids on infarct size and oxidative stress markers in cardiac ischemia reperfusion. *Experimental & Clinical Cardiology* 20(8): 3833-3858. Impact Factor: 0,758. DOI: Sin información. Quartile: Sin información. Editorial: *Cardiology Academic Press*, Canada. ISSN: 1205-6626
83. Cheuquemán C, Arias ME, Risopatrón J, Felmer R, Alvarez J, Mogas T, Sánchez R. 2014. Supplementation of IVF medium with melatonin: effect on sperm functionality and in vitro produced bovine embryos. *Andrologia*. 47(6):604-15. doi: 10.1111/and.12308.
84. Díaz, R., Inostroza, K., Risopatrón, J., Sánchez, R., Sepúlveda, N. 2014. Identification of fatty acids in canine seminal plasma. *Andrologia* 46(2):194-197 (ISI) ISSN 1439-0274 (FI 1,441-Q3)
85. Figueroa, E., I. Valdebenito & J.G. Farias. 2014. Technologies used in the study of sperm function in cryopreserved fish spermatozoa. *Aquaculture Research* (Accepted on line). Impact Factor: 1,32. DOI: 10.1111/are.12630. Quartile: 2. Editorial: Sin información. ISSN: Sin información
86. Hoffstetter R., Andana A., Guzmán P., Ili C.G. Retamal J., Mora B., Roa J.C. Sánchez R. Frecuencia de Virus Papiloma Humano en tumores no ginecológicos de la Región de La Araucanía, Chile. *Int J Morphol* 32:1254-1260, 2014.
87. Luchsinger Ch, Arias ME, Vargas T, Paredes M, Sánchez R and Felmer R. 2014. Stability of reference genes for normalization of reverse transcription quantitative real-time PCR (RT-qPCR) data in bovine blastocysts produced by IVF, ICSI and SCNT. *Zygote*. 22: 505-512.
88. Maettner R., Sterzik K., Isachenko V., Strehler E., Rahimi G., Alabart JL, Sánchez R., Mallmann P., Isachenko E. Quality of human spermatozoa: relationship between high-magnification sperm morphology and DNA-integrity. *Andrologia*. 46:547-555, 2014.
89. Enrique Montiel-Eulefi, Fernando Jara, Claudio Toro, Marcelo Gárce & Pamela Leal. Cytotoxic effect of double emulsion (w/o/w) CuSO4 loaded PLA nanoparticles in MKN-45 gastric adenocarcinoma cell line. *Int. J. Morphol.* 2014. 32 (1), 61-69. F.I: 0,2
90. Paz, E., Quiñones, J., Bravo, S., Rodero, E., Gonzalez, A., Sepúlveda, N. 2014. Identification of G1 and G8 polymorphisms of GDF-9 gene in Araucano creole sheep. *Archivos de Medicina Veterinaria* 46:327-331 (ISI) ISSN 0301-732X (FI 0,275-Q4)
91. Salinas P., Pezo F., Sánchez R., Risopatrón J. Validación de SYBR-14 y 6-CFDA para evaluar la viabilidad e integridad de la membrana plasmática en espermatozoides caninos de raza Chihuahua. *Int J Morphol*. 32(1): 16-21. 2014 F.I: 0,2
92. Santiani A, Evangelista S, Sepúlveda N, Risopatrón J, Villegas J, Sánchez R. Addition of superoxide dismutase mimics during cooling process prevents oxidative stress and improves semen quality parameters in frozen/thawed ram spermatozoa. *Theriogenology*. 82(6): 884-9. 2014. F.I: 1,845
93. Santiani A., Evangelista S., Sepúlveda N., Risopatrón J, Villegas J., Sánchez R. (2014) Addition of Antioxidants Tempo and Tempol During Cooling Process Prevents Oxidative Stress and Improves Frozen/Thawed Ram Semen Quality. *Theriogenology* doi:10.1016/j.theriogenology.2014.07.002. F.I: 1,845
94. Schnettler, B., Sepúlveda, N., Sepúlveda, J., Orellana, L., Miranda, H., Lobos, G., Mora, M. 2014. Consumer preferences towards beef cattle in Chile: Importance of country of origin, cut, packaging, brand and prices. *Revista de la Facultad de Ciencias Agrarias UNCuyo*, 46(1) 143-160 (ISI) ISSN 0370-4661 (FI 0,663-Q3)
95. Zepeda, A.B., G.M. Calaf, C.A. Figueroa & J.G. Farías. 2014. Blueberries prevent the effect of intermittent hypobaric hypoxia in rat epididymis. *Andrologia* 46(7): 766-769. Impact Factor: 1,63. DOI: 10.1111/and.12146. Quartile: 3. Editorial: Wiley-Blackwell, USA. ISSN: 0303-4569
96. Zepeda, A.B., C.A. Figueroa, D. Abdalla, A. Maranhao, P. Ulloa, A. Pessoa & J.G. Farías. 2014. Biomarkers to evaluate the effects of temperature and methanol on recombinant *Pichiapastoris*. *Brazilian Journal of Microbiology* 45(2): 475-483. Impact Factor: 0,592. DOI: Sin información. Quartile: 4. Editorial: Soc. Brasileira Microbiologia, Brazil. ISSN: 1517-8382

97. Zepeda, A.B., C.A. Figueroa, D. Abdalla, A. Maranhao, P. Ulloa, A. Pessoa & J.G. Farías. 2014. HSF-1, HIF-1 and HSP90 expression on recombinant *Pichia pastoris* under fed-batch fermentation. *Brazilian Journal of Microbiology* 45(2): 485-490. Impact Factor: 0,592. DOI: Sin información. Quartile: 4. Editorial: Soc. Brasileira Microbiologia, Brazil. ISSN: 1517-8382
98. Zepeda, A.B., C.A. Figueroa, G. Calaf & J.G. Farías. 2014. Male reproductive system and antioxidants in oxidative stress induced by hypobaric hypoxia. *Andrologia* 46(1): 1-8. Impact Factor: 1,63. DOI: 10.1111/and.12039. Quartile: 3. Editorial: Wiley-Blackwell, USA. ISSN: 0303-4569
99. Arias ME, Ross P, Felmer R. 2013. Culture medium composition affects the gene expression pattern and in vitro developmental potential of bovine somatic cell nuclear transfer (SCNT) embryos. *Biological Research*. 46(4):452-62. doi: 10.4067/S0716-97602013000400016.
100. Arias ME, Sánchez R, Risopatrón J, Pérez L, Felmer R. Effect of sperm pretreatment with sodium hydroxide and dithiothreitol on the efficiency of bovine intracytoplasmic sperm injection. *Reproduction Fertility and Development*, 2013 Jun 18. doi.org/10.1071/RD13009. F.I: 2,538
101. Brevi P., Hartley R., Ili C., Roa JC., Sanchez R. Infección por virus papiloma humano (hpv) en el hombre y su relación con cáncer: estado actual y prospectivas. *Rev Int Andrologia*. 11:25-30, 2013.
102. Cheuquemán C, Merino O, Giojalas L, Von Baer A, Sánchez R, Risopatrón J. Assessment of sperm function parameters and DNA fragmentation in ejaculated alpaca sperm (*Lama Pacos*) by flow cytometry. *ReprodDomestAnim*. 48(3):447-53. 2013. F.I: 1,392
103. Cuevas, Magdalena; Romero, Fernando; Parodi, Jorge. Reactive oxygen species can alter physiological parameters of sperm; the future of macromolecules in boar semen dilutions. *Porcine Research* 3;12/30/2013, Vol. 3 Issue 2, p40-48
104. Farías, J.G., D. Jiménez, J. Osorio, A.B. Zepeda, C. Figueroa & V. Pulgar. 2013. Acclimatization to chronic intermittent hypoxia in mine workers: a challenge to mountain medicine in Chile. *Biological Research* 46(1): 59-67. Impact Factor: 1,041. DOI: Sin información. Quartile: 3. Editorial: Soc. Biología Chile, Chile.
105. Felmer R, Arias ME, Muñoz G, Rio J, Silva M, Berland M, Valdivia R, Kato M, Becker MI, Deloannes A. 2013. Changes in the expression pattern of developmentally important genes and possible relation to the low in vitro and in vivo developmental potential of transgenic nuclear transfer embryos. *Animal Reproduction*. 10:4, p.647-656.
106. Figueroa E., Risopatrón J., Sánchez R., Isachenko E., Merino O., Isachenko V., Valdebenito I. Spermatozoa vitrification of sex-reversed rainbow trout (*Oncorhynchus mykiss*): Effect of seminal plasma on physiological parameters. *Aquaculture* 372–375: 119-126. 2013 F.I: 2,009
107. Figueroa E., Risopatrón J., Sánchez R., Isachenko E., Merino O., Isachenko V., Valdebenito I. Spermatozoa vitrification of sex-reversed rainbow trout (*Oncorhynchus mykiss*): Effect of seminal plasma on physiological parameters. *Aquaculture*. 237:119-126, 2013.
108. Jesús Herrera-Bravo, Enrique Montiel-Eulefi, Talita Glaser, Marcelo Garcés, Pamela Leal & Alexander Henning Ulrich. La translocación in vitro citoplasma/núcleo del factor de transcripción embrionario OCT-4 en células perivasculares propone a la arteria aorta como un nicho quiescente de células madre adultas *Int. J. Morphol.* 2013. 31(4). 1430-1438. F.I: 0,213
109. Inostroza, K., Larama, G. Sepúlveda, N. 2013. Polimorfismo g.17924A>G en el gen FASN y su relación con la composición de ácidos grasos (MUFA y CLA) en la carne de novillos Aberdeen Angus. *Revista Científica FCV-LUZ* 23(4) 329-333 (ISI) ISSN 0717-9502 (FI 0,117-Q4)
110. Inostroza, K., Scheuermann, E., Sepúlveda, N. 2013. The association of 878T>C (SCD Gene) and 17924A>G (FASN Gene) polymorphisms with milk fatty acid composition in Friesian cattle. *Revista Colombiana de Ciencias Pecuarias* 26:263-269 (ISI) ISSN 0120-0690. (FI 0,441-Q4)
111. Luchsinger C, Arias ME, Vargas T, Paredes M, Sánchez R, Felmer R. 2013. Stability of reference genes for normalization of reverse transcription quantitative real-time PCR (RT-qPCR) data in bovine blastocysts generated by IVF, ICSI and SCNT. *Zygote*. 26: 1-8. doi: 10.1017/S0967199413000099.

	<p>112. Ormeño, D.; Romero, F.; Lopez-Fenner, J.; Avila, A.; Martínez-Torres, A. & Parodi, J. Ethanol reduces amyloid aggregation in Vitro and prevents toxicity in cell lines. <i>Archive Medical Research</i>. 4 On Line, 2013. F.I: 2,079</p> <p>113. Paredes, M., Gonzalez, K., Figueroa, J., and Montiel-Eulefi, E. Immunomodulatory effect of prolactin on Atlantic salmon (<i>Salmo salar</i>) macrophage function. <i>Fish Physiol Biochem</i>, 1-7. (2013). DOI 10.1007/s10695-013-9777-7.F.I: 1,545</p> <p>114. Pino, J.A., N. Osses, D. Oyarzun, J.G. Farías, R.D. Moreno & J.G. Reyes. 2013. Differential effects of temperature on reactive oxygen/nitrogen species production in rat pachytene spermatocytes and round spermatids. <i>Reproduction</i> 145(2): 203-212. Impact Factor: 3,262. DOI: 10.1530/REP-12-0330. Quartile: 1. Editorial: Bioscientifia Ltd., England. ISSN: 1470-1626</p> <p>115. Rabert, C., D. Weinacker & J.G. Farías. 2013. Recombinants proteins for industrial uses: utilization of Pichiapastori expression system. <i>Brazilian Journal of Microbiology</i> 44(2): 351-356. Impact Factor: 0,452. DOI: Sin información. Quartile: 4. Editorial: Soc. Brasileira Microbiologia, Brazil. ISSN: 1517-8382</p> <p>116. Romo, E., D. Weinacker, A.B. Zepeda, P. Chavez-Crooker & J.G. Farías. 2013. Bacterial consortium for copper extraction from sulphide ore consisting mainly of chalcopyrite. <i>Brazilian Journal of Microbiology</i> 44 (2): 523-528. Impact Factor: 0,452. DOI: Sin información. Quartile: 4. Editorial: Soc. Brasileira Microbiologia, Brazil. ISSN: 1517-8382</p> <p>117. Salinas P., Sanchez R., Risopatrón J. Cryopreservation of Canine Spermatozoa at -80 degrees C. <i>Int J Morphol</i>. 31(1); 217-224. 2013. F.I: 0,213</p> <p>118. Sanchez R., Schulz M., Risopatron J., Isachenko V., Isachenko E. Vitricación de espermatozoides: una alternativa a la inyección intracitoplasmática de espermatozoides en paciente con oligoastenozoospermia severa. <i>Rev Int Andrologia</i>. 11: 36-39, 2013.</p> <p>119. Santiani A., Evangelista S., Valdivia M., Vargas S., Valdivia M., Risopatrón J., Sánchez R. Effect of the addition of two superoxide dismutase analogues (Tempo and Tempol) to alpaca semen extender for cryopreservation. <i>Theriogenology</i> 79(5): 842-846. 2013. F.I: 2,082</p> <p>120. Silva R., León D., Viscarra T., Ili C., Roa JC., Sánchez R., Guzmán P., Brevi P. Frecuencia de la infección por <i>Chlamydia trachomatis</i> en un grupo de mujeres de la Región de la Araucanía, Chile. <i>Rev Chil Inf</i>, 30:611-615, 2013.</p> <p>121. Silva R., León D., Brevi P., Ili C., Roa JC.; Sánchez R. Diagnóstico de la infección por virus papiloma humano en el hombre. <i>Rev Chil Inf</i>, 30:186-192, 2013.</p> <p>122. Viscarra T., Brevi P., Andana A., Sánchez R. Infecciones de Transmisión Sexual en Semen. El Hombre como Vector de Transmisión. <i>Int. J. Morphol.</i>, 31:254-263, 2013.</p> <p>123. Weinacker, D., C. Rabert, A.B. Zepeda, C. Figueroa & J.G. Farías. 2013. Application of recombinant Pichiapastori in the healthcare industry. <i>Brazilian Journal of Microbiology</i> 44(4): 1043-1048. Impact Factor: 0,452. DOI: Sin información. Quartile: 4. Editorial: Soc. Brasileira Microbiologia, Brazil. ISSN: 1517-8382</p> <p>124. Zepeda, A., A. Pessoa, R.L. Castillo, C.A. Figueroa, V.M. Pulgar & J.G. Farías. 2013. Cellular and molecular mechanism in the hypoxic tissue: role of HIF-1 and ROS. <i>Cell Biochemistry and Function</i> 31(6): 451-459. Impact Factor: 2,134. DOI: 10.1002/cbf.2985. Quartile: 3. Editorial: Wiley-Blackwell, USA. ISSN: 0263-6484</p>
--	--

Nota: Aquellas publicaciones en las que participa más de un académico del Programa, se incluyeron una sola vez.