

## Scott Ericsson

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### Education

University of Missouri-Columbia  
Postdoctoral Training in Reproductive Physiology 1992

University of Nevada, Reno  
Ph.D. in Biology (Reproductive Physiology)  
Dissertation: "Tri-functional cytometric analyses of the viability, morphology  
and fertility potential of cryopreserved bovine spermatozoa" 1991

University of Nevada, Reno  
M.S. in Animal Science (Reproductive Physiology)  
Thesis: "Dual Fluorescent viability staining and the potential fertilizing capacity  
of cryopreserved spermatozoa" 1987

San Francisco State University  
B.A. in Economics 1985

Colorado State University  
B.S. in Animal Science Reproductive Physiology) 1983

### Academic Awards

Co-author of a poster that won the best poster award at the  
Annual Conference for the Society for Theriogenology 1995  
Outstanding Young Men of America 1998  
Who's Who Among America's Teachers 1998  
Who's Who Among America's Teachers 2000  
Lexington Who's Who, Millennium edition 2001  
Teaching Award of Merit. North American Colleges and  
Teachers of Agriculture (NACTA) 2003

### Teaching Experience

Sul Ross State University 2003-present  
Professor

Sul Ross State University 1998-2003  
Associate Professor

Sul Ross State University 1992-1998  
Assistant Professor

### Professional Publications and Presentations

#### Books:

Ericsson, R. J. and S. A. Ericsson. Sex Ratios. Encyclopedia of Reproduction, volume 4. Eds: E. Knobil and J. D. Neill.  
Academic Press. San Diego, CA. Pages 431-437. 1998.

#### Journal:

- Ericsson, S. A., D. L. Garner, D. Redelman and K. Ahmad. Assessment of the viability and fertilizing potential of cryopreserved bovine spermatozoa using dual fluorescent staining and two flow cytometric systems. *Gamete Research*. 22:355-368. 1989.
- Ericsson, S. A., D. L. Garner, L. A. Johnson, D. Redelman and K. Ahmad. Flow cytometric evaluation of cryopreserved bovine spermatozoa processed using a new antibiotic combination. *Theriogenology*. 33:1211-1220. 1990.
- Kramer, R. Y., D. L. Garner, S. A. Ericsson, D. A. Wesen, T. W. Downing and D. Redelman. The effect of cottonseed components on testicular development in pubescent rams. *Veterinary and Human Toxicology* 33(1):11-16. 1991.
- Downing, T. W., D. L. Garner, S. A. Ericsson and D. Redelman. Effect of fluorescent staining on the metabolism of cryopreserved bovine sperm. *Journal of Histochemistry and Cytochemistry*. 39(4):485-489. 1991.
- Glass, R. H., S. A. Ericsson, R. J. Ericsson, M. T. Drouin, L. Marcoux and H. Sullivan. The resazurin reduction test provides an assessment of sperm activity. *Fertility and Sterility*. 56(4):743-746. 1991.
- Ericsson, S. A. and R. J. Ericsson. The sex ratio of male sex preselected children born to couples with exclusively female offspring. *Archives of Andrology*. 28:121-123. 1992.
- Ericsson, S. A. and R. J. Ericsson. Couples with exclusively female offspring have an increased probability of a male child after using male sex preselection. *Human Reproduction*. 7(3):372-373. 1992.
- Downing, T. W., D. L. Garner, S. A. Ericsson and G. C. J. Fernandez. Alteration of sperm metabolism by the addition of cytoplasmic droplets. *Assisted Reproductive Technology / Andrology*. 3:289-293. 1992.
- Ericsson, S. A., D. L. Garner, C. A. Thomas, T. W. Downing, and C. E. Marshall. Interrelationships among fluorometric analyses of spermatozoal function, classical seminal quality parameters and the fertility of cryopreserved bovine spermatozoa. *Theriogenology*. 39(5):1009-1024. 1993.
- Kramer, R. Y., G. S. Prins, E. S. Bruns, S. A. Ericsson, and D. L. Garner. Comparison of motility and flow cytometric assessments of seminal quality in fresh, 24-hour extended and cryopreserved human spermatozoa. *Journal of Andrology*. 14(5):374-384. 1993.
- Dart, M. G., J. Mesta, C. Crenshaw and S. A. Ericsson. Modified resazurin reduction test for assessment of the fertility potential of bovine spermatozoa. *Archives of Andrology*. 33(2):71-75. 1994.
- Ericsson, S. A. and R. J. Ericsson. Effects of norepinephrine and testosterone propionate on formation of epididymal lesions in rats administered the male antifertility agent  $\alpha$ -chlorohydrin. *Advances in Contraceptive Delivery Systems*. 1996.
- Carter, R. A., S. A. Ericsson, C. D. Corn, P. R. Weyerts, M. G. Dart, S. G. Escue and J. Mesta. Assessing the fertility potential of equine semen samples using the reducible dyes methylene green and resazurin. *Archives of Andrology*. 40:57-64. 1997.
- Mesta, J. G., S. A. Ericsson, M. G. Dart, R. G. Wansley and P. R. Weyerts. The use of reducible dyes resazurin and methylene green for assessing the fertility potential of porcine spermatozoa. *Advances in Reproduction*. 1:139-147. 1998.
- Ericsson, R. J. and S. A. Ericsson. Human sex preselection: compilation of worldwide clinical results using the albumin method. *Today's Therapeutic Trends*. 16(2):107-119. 1998.
- Wansley, R. G., S. A. Ericsson, C. D. Corn, M. Dart and C. Crenshaw. Hair loosening in angora goats using cyclophosphamide. *Small Ruminant Research*. 28:289-291. 1998.
- Martin, L. M., C. C. Crenshaw, J. A. Dean, Jr., M. G. Dart, and S. A. Ericsson. Determination of the number of motile spermatozoa within an ovine semen sample using the reducible dye resazurin. *Small Ruminant Research*. 1748:1-5. 1998.
- Crenshaw, C. C., L. M. Martin, C. R. Mains, R. D. Wright, M. G. Dart, R. M. Perkins and S. A. Ericsson. The use of buck and ram extenders and two packaging systems to cryopreserve aoudad (*Ammotragus Leriva*) spermatozoa. *Theriogenology*. 54:69-74. 2000.
- Silverman, A. Y., S. R. Stephens, M. T. Drouin, R. G. Zack, J. Osborne and S. A. Ericsson. Female sex selection using clomiphene citrate and albumin separation of sperm. *Human Reproduction*. 17(5):1254-1256. 2002.
- Purdy, P. H., S. A. Ericsson, R. E. Dodson, K. L. Sternes, and D. L. Garner. Effects of Silibinin and Catechin on the Motility of Extended Cooled Caprine Spermatozoa. *Small Ruminant Research*. 55:239-243. 2004.

## **Proceedings:**

- Kramer, R. Y., D. L. Garner, S. A. Ericsson, D. Redelman and T. W. Downing. The effect of dietary cottonseed on testicular development in pubertal rams. *Proceedings Western Section American Society of Animal Science*. 40:309-312. 1989.
- Sternes, K. L., S. A. Ericsson, T. W. Downing and D. L. Garner. Relative mitochondrial DNA content and weight per day of age in beef heifers. *Proceedings Western Section American Society of Animal Science*. 41:372-375. 1990.
- Dart, M. G., J. Mesta, C. Crenshaw and S. A. Ericsson. Assessment of the fertility potential of bovine spermatozoa using the reducible dye resazurin. *Proceedings Western Section American Society of Animal Science*. 45:276-278. 1994.

- Wansley, R. G., S. A. Ericsson, C. D. Corn, M. Dart and C. Crenshaw. Cyclophosphamide as a hair loosening agent in Angora goats. *Proceedings Western Section American Society of Animal Science*. 45:86-87. 1994.
- Escue, S. G., R. A. Carter and S. A. Ericsson. Assessment of the fertility potential of equine semen using the reducible dyes thionin and 2,6-dichloroindophenol. *Proceedings Western Section American Society of Animal Science*. 47:201-203. 1996.
- Comstock, A. R., S. A. Ericsson, J. S. Pendergraft, K. L. Sternes, J. A. Dean and S. E. Rivera. Assessment of Fresh Extended Equine Semen Samples Using Spectrophotometry and Resazurin. *Proceedings from the Equine Nutrition and Physiology Society*. Pp. 262-267. 1999.

### **Abstracts and presentations to scientific societies:**

- Ericsson, S. A., D. L. Garner, D. Redelman and K. Ahmad. Dual fluorescent viability staining and fertilizing potential of cryopreserved bovine spermatozoa. *Society for the Study of Reproduction, Urbana, IL. Biology of Reproduction. Supplement 1, 36:75*. 1987.
- Ericsson, S. A., D. L. Garner, D. Redelman and K. Ahmad. Flow cytometric evaluation of cryopreserved bovine spermatozoa using new antibiotic combinations. *American Society of Animal Science, Logan, UT. Journal of Animal Science*. 65, Supplement 1:372, Abstract 424. 1987.
- Ericsson, S. A., R. Y. Kramer, D. L. Garner and D. Redelman. Tri-functional fluorescent staining of cryopreserved bovine spermatozoa. *American Society of Andrology, New Orleans, LA. Journal of Andrology*. 10, p. 31. 1989.
- Ericsson, S. A., D. L. Garner, T. W. Downing and D. Redelman. Tri-functional fluorescent staining of fertility tested bovine spermatozoa. *American Society of Andrology, Columbia, SC. Journal of Andrology*. 11, No. 1, p-51, Abstract 123. 1990.
- Ericsson, S. A., D. L. Garner, T. W. Downing and C. E. Marshall. Tri-functional cytometric analyses of fertility-tested cryopreserved bovine spermatozoa. *American Society of Andrology, Montreal, Canada. Journal of Andrology*. 12, Supplement, p-49, Abstract 98. 1991.
- Ericsson, S. A., M. L. Boice, H. Funahashi and B. N. Day. Assessment of porcine oocytes using brilliant cresyl blue. *International Embryo Transfer Society. Baton Rouge, LA. Theriogenology*. 39(1):214. Abstract 60. 1993.
- Garner, D. L., S. A. Ericsson, D. Redelman and K. Ahmad. Carboxydimethylfluorescein acetate and Hydroethidine staining of bovine spermatozoa, *Society for Analytical Cytology. Cambridge, England. Cytometry. Supplement 1, p. 88, Abstract 533*, 1987.
- Ericsson, S. A., M. A. Winer, D. J. Miller and R. L. Ax. Assessment of the binding of fluorescentated heparin to bovine spermatozoa using flow cytometric analyses. *21th Annual Meeting of the Society for the Study of Reproduction, Seattle, WA. Biology of Reproduction. Supplement 1, 38:72*. 1988.
- Kramer, R. Y., D. L. Garner, S. A. Ericsson, D. Redelman and T. W. Downing. The effect of dietary cottonseed on testicular development in pubertal rams. *Western Section American Society of Animal Science, Bozeman, MT. Journal of Animal Science*. 67, Supplement, 2:199, Abstract 74. 1989.
- Downing, T. W., D. L. Garner, S. A. Ericsson and D. Redelman. Alteration of sperm metabolism by fluorescent viability stains. *XIV International Meeting of the Society for Analytical Cytology, Asheville, NC. Cytometry. Supplement 4, p. 41, Abstract 276*, 1990.
- Ericsson, S. A., D. L. Garner, R. Y. Kramer, T. W. Downing and D. Redelman. Modified tri-functional fluorescent staining of cryopreserved bovine sperm. *XIV International Meeting for the Society for Analytical Cytology, Asheville, NC. Cytometry. Supplement 4, p. 41, Abstract 275*, 1990.
- Downing, T. W., S. A. Ericsson, D. L. Garner. Effects of added cytoplasmic droplets on bovine metabolism. *American Society of Andrology, Columbia, SC. Journal of Andrology*. 11, No. 1, p-51, Abstract 122. 1990.
- Sternes, K. L., S. A. Ericsson, T. W. Downing and D. L. Garner. Relative mitochondrial DNA content and weight per day of age in beef heifers. *Western Section American Society of Animal Science, Reno, NV. Journal of Animal Science*. 68, Supplement 1:180, Abstract 81. 1990.
- Garner, D. L., S. A. Ericsson, T. W. Downing and B. R. Behr. Functional assessment of cryopreserved human spermatozoa using flow cytometric and computer-assisted motility analyses. *American Society for Cell Biology, San Diego, CA. Journal Cell Biology*, 111(5): Part 2, p. 363a, Abstract 2036, 1990.
- Ericsson, S. A., D. L. Garner, T. W. Downing and C. E. Marshall. Comparison of flow cytometric analyses with classical viability and morphologic parameters of bovine spermatozoa. *American Society of Andrology, Montreal, Canada. Journal of Andrology*. 12, Supplement, p-49, Abstract 97. 1991.
- Garner, D. L., S. A. Ericsson and D. Redelman. Indo-1 labeling to discriminate motile sperm by flow cytometry. *XV International Meeting for the Society for Analytical Cytology, Bergen, Norway. Supplement 5, p. 41-42, abstract 124*, 1991.

- Garner, D. L., R. Y. Kramer, G. S. Prins, E. S. Bruns and S. A. Ericsson. Interrelationships among flow cytometric and sperm motility parameters in human semen. Society for the Study of Reproduction, Vancouver, Canada. Biology of Reproduction. Supplement 1, 44:116, Abstract 256. 1991.
- Kramer, R. Y., G. S. Prins, E. S. Bruns, S. A. Ericsson and D. L. Garner. Functional differences among fresh, 24-hour extended and cryopreserved human spermatozoa. American Society of Andrology, Bethesda, MD. Journal of Andrology. Supplement, p-34, Abstract 65. 1992.
- Garner, D. L., S. A. Ericsson, C. A. Thomas and C. E. Marshall. Interrelationships of flow cytometric measurements and classical seminal quality determinations with fertility of cryopreserved bull semen. 12th International Congress on Animal Reproduction, The Hague, Netherlands. August 23-27, Vol. 1: Free Communication 148. 1992.
- Dart, M. G., J. Mesta, C. Crenshaw and S. A. Ericsson. Assessment of the fertility potential of bovine spermatozoa using the reducible dye resazurin. Western Section of American Society of Animal Science, New Mexico State University, Las Cruces, NM. Journal of Animal Science. 72, Supplement 2:117, Abstract 84. 1994.
- Wansley, R. G., S. A. Ericsson, C. D. Corn, M. Dart and C. Crenshaw. Cyclophosphamide as a hair loosening agent in Angora goats. Western Section of American Society of Animal Science, New Mexico State University, Las Cruces, NM. Journal of Animal Science. 72, Supplement 2:102, Abstract 27. 1994.
- Sternes, K. L., S. Kim and S. A. Ericsson. Use of resazurin and methylene green for estimating bacterial numbers. American Society of Microbiology. Washington D.C. Meeting General Abstracts, page 433, Abstract Q191. 1995.
- Mesta, J., S. A. Ericsson, M. G. Dart, R. G. Wansley and P. R. Weyerts. Assessment of fertility potential of porcine spermatozoa using the reducible dyes methylene green and resazurin. Southern Section of American Society of Animal Science, New Orleans, LA. 73, Supplement 1:26, Abstract 26. 1995.
- Mains, C. R., M. Perkins, M. G. Dart, R. G. Wansley, C. D. Corn and S. A. Ericsson. Relationships between semen characteristics and level of dominance in bachelor groups of Blackbuck antelope (*Antilope cervicapra*). Society for the Study of Reproduction 28th Annual Meeting. Davis, CA. Biology of Reproduction. Supplement 1, 52:62. Abstract 23. 1995.
- Crenshaw, C. C., L. M. Martin, C. R. Mains, R. D. Wright, M. G. Dart, R. M. Perkins and S. A. Ericsson. Cryopreservation of Aoudad (*Ammotragus Lervia*) spermatozoa using two different protocols. Annual Conference of the Society for Theriogenology. San Antonio, TX. Proceedings for Annual Meeting, p 321. 1995.
- Carter, R. A., S. A. Ericsson, C. D. Corn, P. R. Weyerts, S. G. Escue and J. Mesta. Determination of the fertility potential of equine semen samples using the reducible dyes methylene green and resazurin. Annual Conference of the Society for Theriogenology. San Antonio, TX. Proceedings for the Annual Meeting, p 316. 1995.
- Santana, L. M., K. L. Sternes, and S. A. Ericsson. Using dyes as a potential indicator of bacterial numbers in river water. 99<sup>th</sup> Annual Meeting of the Texas Academy of Science. Galveston, TX. Proceedings for the Annual Meeting, p 57, abstract number 69. 1996.
- Martin, L. M., C. C. Crenshaw, J. A. Dean, M. G. Dart and S. A. Ericsson. Evaluation of ovine semen samples for the number of motile spermatozoa using the reducible dye resazurin. American Society of Animal Science, Rapid City, SD. Journal of Animal Science. 74, Supplement 1:216, Abstract 438. 1996.
- Escue, S. G., R. A. Carter and S. A. Ericsson. Assessment of the fertility potential of equine semen using the reducible dyes thionin and 2,6-dichloroindophenol. American Society of Animal Science, Rapid City, SD. Journal of Animal Science. 74, Supplement 1:217, Abstract 440. 1996.
- Perkins, R. M., C. R. Mains, M. G. Dart, R. G. Wansley, B. R. Behr and S. A. Ericsson. Influence of testosterone on measures of dominance in bachelor herds of blackbuck antelope (*Antilope cervicapra*). Annual Meeting of the Animal Behavior Society. Flagstaff, AR. 1996.
- Santana, L. M., K. L. Sternes and S. A. Ericsson. Using dyes as a potential indicator of bacterial number in water. American Society of Microbiology, 97<sup>th</sup> Annual Meeting Abstracts: 480, 1997.
- Dean, J. A., S.A. Ericsson, A. R. Comstock and J. E. Bruemmer. Assessment of spermatozoal quality in extended cooled equine samples using the reducible dye resazurin. American Society of Animal Science, Nashville, TN. Journal of Animal Science. 75, Supplement 1:221, Abstract 336. 1997.
- Comstock, A. R., S. A. Ericsson, J. S. Pendergraft, K. L. Sternes, J. A. Dean and S. E. Rivera. Assessment of Fresh Extended Equine Semen Samples using Spectrophotometry and Resazurin. Journal of Equine Veterinary Science. 18(10):661. 1998.
- Comstock, A. R., S. A. Ericsson, J. S. Pendergraft, K. L. Sternes, J. A. Dean and S. E. Rivera. The Resazurin Test and Spectrophotometric Analysis of Fresh Extended Equine Semen Samples. Equine Nutrition and Physiology Society, North Carolina. 1999.
- Dodson, R. E., S. A. Ericsson, K. L. Sternes, T. W. Downing and P. H. Purdy. Use of the Reducible Dyes Resazurin, 2',6'-dichloroindophenol and Methylene Green to Estimate Rumen Microbial Numbers. American Society of Animal Science, Indianapolis, IN. Journal of Animal Science. 77 (Supplement 1):253. 1999.

- Purdy, P. H., S. A. Ericsson, R. E. Dodson, K. L. Sternes and D. L. Garner. Assessment of the Effects of Flavonoids on the Motility of Extended Cooled Caprine Spermatozoa. Society for the Study of Reproduction 32th Annual Meeting. Pullman, WA. Biology of Reproduction. 60 (Supplement 1):134. 1999.
- Woodward, C. A., S. A. Ericsson, P. H. Purdy, and M. D. Fox. Effect of the flavonoid catechin or epicatechin on the motility of extended cooled equine spermatozoa. American Society of Animal Science, Baltimore, MD. Journal of Animal Science. 78 (Supplement 1):197. 2000.
- Campbell, W. T., S. A. Ericsson, J. S. Pendergraft, K. K. Korth, and J. A. Pitchford. Evaluation of the fertility potential of extended cooled equine spermatozoa using the resazurin reduction test and NADH<sub>2</sub>. American Society of Animal Science, Indianapolis, IN. Journal of Animal Science. 79 (Supplement 1):466. 2001.
- Pitchford, J. A., S. A. Ericsson, K. K. Korth, L. L. Green, and W. T. Campbell. Assessment of the effects of flavonoids on the post-thaw motility of cryopreserved bovine spermatozoa. American Society of Animal Science, Quebec City, Quebec. Journal of Animal Science. 85 (Supplement 1):303. 2002.
- Dzakuma, J. M., S. A. Ericsson, B. L. Sayre, T. A. Gipson, and H. D. Blackburn. Caprine genetic resource conservation program. American Society of Animal Science, Phoenix, Arizona. Journal of Animal Science. 81 (Supplement 1):68. 2003.
- Spiller, S. F., S. A. Ericsson, R. Realivasquez, W. T. Campbell, K. L. Sternes, P. H. Purdy, H. D. Blackburn, and J. M. Dzakuma. INHA microsatellite polymorphisms in Angora bucks. American Society of Animal Science, St. Louis, Missouri. Journal Animal Science. 82 (Supplement 1):378. 2004.
- Realivasquez, R., S. A. Ericsson, S. F. Spiller, W. T. Campbell, K. L. Sternes, P. H. Purdy, H. D. Blackburn, and J. M. Dzakuma. Spanish buck  $\beta$ -B inhibin/activin (INHBB) microsatellite polymorphisms. American Society of Animal Science, St. Louis, Missouri. Journal Animal Science. 82 (Supplement 1):377-378. 2004.

#### **Other publications:**

- Ericsson, S. A. Dual Fluorescent viability staining and the potential fertilizing capacity of cryopreserved spermatozoa. M.S. Thesis. University of Nevada, Reno. 1987.
- Garner, D. L., S. A. Ericsson, D. Redelman and K. Ahmad. Assessment of bull semen fertility. College of Agriculture, University of Nevada, Reno, SP-88-2, p. 55. 1988.
- Kramer, R. Y., D. L. Garner, S. A. Ericsson, D. Redelman and T. W. Downing. The potentially deleterious effects of cottonseed on testicular development in pubertal ram lambs. College of Agriculture, University of Nevada, Reno, SP-89-2, p. 40. 1989.
- Ericsson, S. A., D. L. Garner, T. W. Downing and D. Redelman. Development of a fluorescent staining system to determine the potential fertility of bulls. College of Agriculture, University of Nevada, Reno, SP-90-01, p. 37. 1990.
- Kramer, R. Y., D. L. Garner, S. A. Ericsson, T. W. Downing and D. Redelman. Reproductive toxicity in ram lambs fed purified gossypol and cottonseed rations. College of Agriculture, University of Nevada, Reno, SP-90-01, p. 34. 1990.
- Downing, T. W., S. A. Ericsson and D. L. Garner. Alteration of bull sperm metabolism by added cytoplasmic droplets. College of Agriculture, University of Nevada, Reno, SP-90-01, p. 36. 1990.
- Ericsson, S. A. Tri-functional cytometric analyses of the viability, morphology and fertility potential of cryopreserved bovine spermatozoa. Ph.D. Dissertation. University of Nevada, Reno. 1990.
- Garner, D. L., S. A. Ericsson, C. A. Thomas and C. E. Marshall. Interrelationships of flow cytometric measurements and classical seminal quality determinations with fertility of cryopreserved bull semen. 12th International Congress on Animal Reproduction. The Hague, Netherlands, Vol. 1, Free Communications: 148. pp. 467-469. 1992.

#### **Other presentations:**

- Ericsson, S. A. Fertility Research. Texas and Southwestern Cattle Raisers Association Meeting. Alpine, Texas. 1996.
- Ericsson, S. A. Sexed Semen and Fertility Diagnostics: Where Are We? West Texas Range Bull Workshop. Texas A&M Extension Service. Alpine, Texas. January 1998.
- Ericsson, S. A. Beef Production from Conception to Consumption: An Innovative Program for Hispanic and Other Underrepresented Students. Hispanic Serving Institutions, Project Director's Meeting. Washington D.C. 2008