

HIGHLIGHTS FOR:

Dr. JUAN R. CORREA PEREZ, Ph.D.

Reproductive Physiology-Andrology/Embryology

EDUCATIONAL BACKGROUND

Post-Doctoral Training- Department of Medicinal Chemistry and Pharmaceutics, University of Kentucky, May 1997. Involved in the development and testing of new formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone and iodine as possible vaginal contraceptives with anti-HIV properties. Funding provided by the National Institute of Child Health and Human Development.

Ph.D., Reproductive Physiology-Andrology; Statistics minor
Conferred, December 1996
University of Kentucky

M.S., Reproductive Physiology-Andrology
Conferred, May 1994
University of Kentucky

B.S., *Animal Sciences*
Conferred, December 1990
University of Puerto Rico-Mayagüez

WORK AND PROFESSIONAL EXPERIENCE

YEARS OF EXPERIENCE IN THE FIELD OF REPRODUCTIVE PHYSIOLOGY

Andrology- 13 years
Clinical embryology- 7 years

Associate Member, Institutional Animal Care and Use Committee (IACUC), San Juan Bautista School of Medicine, Caguas PR, March 2004-Present

Involved in the development, implementation and oversight of research protocols in which the use of animals is required for investigational purposes. According to U.S. federal law, institutions that use laboratory animals for research or instructional purposes must establish an **Institutional Animal Care and Use Committee (IACUC)** to oversee and evaluate all aspects of the institution's animal care and use program. One of the main goals of laboratory animal scientists is assuring research animals are not exposed to any unnecessary pain or stress. While the Animal Welfare Act strictly regulates experiments on animals, statistics show that most experiments are not painful to animals.

Associate Professor, Department of Physiology/Pathology, San Juan Bautista School of Medicine, Caguas PR, January 2004-Present

Development of a research program in conjunction with the establishment and implementation of a reproductive physiology laboratory.

Scientific Director, Centro de Fertilidad del Caribe, Río Piedras PR, January 2000-Present

In addition to previous duties described below for Andrology Laboratory Director, the following responsibilities are included: overall operation, administration, and technical and scientific oversight of the Andrology and Embryology laboratories.

Andrology Laboratory Director, Centro de Fertilidad del Caribe, Río Piedras PR, January 1998-December 1999

Duties and responsibilities include: Semen analysis for male infertility work-up, and preparation for artificial insemination and other assisted reproductive technologies. Conduct all clinical activities related to an Andrology-IVF laboratory. Performance of embryology, and gamete and embryo micromanipulation procedures (IVF, ICSI, TESA, AZH). Development and analysis of research protocols, preparation of manuscripts for publication, conferences and seminars.

Post-Doctoral Fellow, Department of Medicinal Chemistry and Pharmaceutics, University of Kentucky, April 1994-May 1997

Involved in the development and testing of new formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone and iodine as possible vaginal contraceptives with anti-HIV properties. Other duties include the recruitment of semen donors, implementation of research protocols, data collection, animal care and handling, preparation of progress reports and manuscripts for publication in scientific journals.

Clinical/Research models: Human, rabbit

Andrology Laboratory Director, Andrology Institute of America, Lexington KY, January 1992-November 1997

Consultation of patients referred for infertility workup, semen analysis, semen preparation for artificial insemination and other assisted reproductive technologies. Assist in the development and testing of new technologies for semen/sperm assessment and sperm quality improvement.

Research Assistant, Department of Animal Sciences, University of Kentucky, January 1992-December 1996

Design and conduct research related to M.S. and Ph.D. dissertation. Responsible for management of the Reproductive Physiology-Andrology Lab.,

equipment maintenance, monitoring and analysis of frozen bovine semen used for artificial insemination and research by the dairy and beef cattle units. Assist in the management and maintenance of experimental facilities, animal care and handling. Represent the University of Kentucky at professional meetings. Preparation and publication of studies in scientific journals.
Animal Models: Bovine, murine, rabbits

CURRENT RESEARCH INTERESTS

Preservation of male reproductive health

Reversible causes of male infertility

Management of diabetic patients and retrograde ejaculation

The relationship of abstinence and semen quality

The timing of the ejaculation response

Stress management and the erection/ejaculation response

Psychological factors involved in the semen collection via masturbation

Identification and management of epididymal necrostermia

Sperm membrane functional integrity and the effect of the colloid osmotic pressure under hypoosmotic conditions

Identification and improvement of environmental factors to optimize the culture of mammalian gametes and embryos

Interaction of incubator environment and culture media equilibration/aging

Embryo transfer techniques and outcome

HONORS

Kentucky Colonel (1997)- The honorable order of Kentucky Colonels founded in 1932. The highest honor awarded by the State of Kentucky is the Kentucky Colonel. The Colonels are Kentucky ambassadors of goodwill and fellowship around the world.

Golden Key National Honor Society-member (1995)

The Honor Society of Agriculture: Gamma Sigma Delta-member (1994)

Cum Laude Graduate (1991)

University of Puerto Rico-Mayagüez

College of Agriculture Honor Student (1990)

University of Puerto Rico-Mayagüez

PROFESSIONAL RECOGNITION

Who's Who in America- Biography included in the 60th (2006) Edition (Diamond Edition) of **Who's Who in America**. Since 1899, when A.N. Marquis published the First Edition of **Who's Who in America**, business people, researchers, educators, students and others have relied upon its accuracy and currency of information. **Who's Who in America** continues to be recognized globally as the premier biographical data source pertaining to living Americans of notable achievement from every significant field of endeavor. February 23, 2005.

6th Annual **Royan International Research Award** nominations for the best five research papers in reproductive biomedicine and stem cells, Royan Institute, Tehran, IRAN- Nomination of the manuscript entitled "Development of differential sperm tail swelling patterns during exposure of human spermatozoa to hypoosmotic environments regulated by a colloid osmotic pressure effect" by **Correa-Pérez JR**, Fernández-Pelegrina R, Zavos PM., published in the journal *Andrologia* 2004;36:84-86.

Invitation to present research work at the "World Conference on Dosing of Antiinfectives-Dosing the magic bullets" and the "Ehrlich Symposia" that are held to commemorate the great Paul Ehrlich (co-winner of the 1908 Nobel Prize in medicine) in the year of his 150th birthday, September 9-11, 2004, Nürnberg, Germany. (www.ehrlich2004.org). July 1, 2004.

Invitation to apply for the 2005 Rolex Awards for Enterprise. "Established in 1976 to foster a spirit of enterprise around the world, the Rolex Awards for Enterprise provide visionary individuals with the means to turn their ideas into reality". June 29, 2004.

Invitation to submit papers to the *Asian Journal of Andrology* from the President and Editor-in-Chief, *Professor Shao-Zhen Qian*, and Chairman of the Advisory Board, *Professor Geoffrey MH Waites*. This solicitation is extended by recognition of academic background and achievements in the field of andrology, March 25, 2004.

5th Annual Royan International Research Award nominations for the best five research papers in reproductive biomedicine- Nomination of the manuscript entitled "The effect of colloid osmotic pressure in human spermatozoa exposed to hypoosmotic conditions" by **Correa-Pérez JR**, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM., published in the journal *Andrologia* (2003;35:117-120).

Invitations to review journal manuscripts as an *Ad hoc reviewer*:

THE INTERNATIONAL JOURNAL OF MEN'S GENDER AND HEALTH, the official journal of the International Society for Men's Health (ISMH), 2005-Present.

Invitation to review manuscripts submitted to ***FERTILITY AND STERILITY***, the official journal of the American Society for Reproductive Medicine (ASRM), 2005-Present

Invitation to review manuscripts submitted to ***THERIOGENOLOGY***, an international journal for animal reproduction, 1997-Present.

Invitation to review manuscripts submitted to the ***MIDDLE EAST FERTILITY SOCIETY (MEFS) JOURNAL***, 1997-Present.

SCIENTIFIC CONTRIBUTIONS

Manuscripts in Refereed Journals

1. **Correa JR**, Zavos PM. The hypoosmotic swelling test: its employment as an assay to evaluate the functional integrity of the frozen-thawed bovine sperm membrane. *Theriogenology* 1994;42:351-360.
2. Zavos PM, **Correa JR**, Zarmakoupis PN. Improvements and short-term viability of mouse epididymal spermatozoa recovered through the SpermPrep™ filtration method. *Theriogenology* 1994;42:1035-1042.
3. Zavos PM, **Correa JR**, Zarmakoupis PN. Epididymal spermatozoa: recovery and subsequent improvements of mouse epididymal spermatozoa via the SpermPrep™ filtration method. *Toboku Journal of Experimental Medicine* 1995;175:101-109.
4. Zavos PM, **Correa JR**, Sofikitis N, Kofinas GD, Zarmakoupis PN. A method of cryostorage and selection of viable sperm for use in the various assisted reproductive techniques. *Toboku Journal of Experimental Medicine* 1995;176:75-81.
5. **Correa JR**, Zavos PM. Frozen-thawed bovine spermatozoa diluted by slow or rapid dilution method: measurements on occurrence of osmotic shock and sperm viability. *Theriogenology* 1995;44:963-971.
6. Zavos PM, **Correa JR**, Nosek D, Mohammadi F, Digenis GA. Comparative spermicidal performance of iodinated and non-iodinated formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone. *Contraception* 1996;54:39-41.
7. **Correa JR**, Rodriguez MC, Patterson DJ, Zavos PM. Thawing and processing of cryopreserved bovine spermatozoa at various temperatures and their subsequent

effects on sperm viability, osmotic shock and sperm membrane functional integrity. *Theriogenology* 1996;46:413-420.

8. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Measurements of the sperm motility index via the sperm quality analyzer and its relationship to other sperm qualitative parameters. *Theriogenology* 1996;46:421-427.
9. **Correa JR**, Zavos PM. Preparation and recovery of frozen-thawed bovine spermatozoa via various sperm selection techniques employed in assisted reproductive technologies. *Theriogenology* 1996;46:1225-1232.
10. Zavos PM, **Correa JR**, Sofikitis N, Toda T, Zarmakoupis-Zavos PN. The usefulness of pentoxifylline for the recovery of human spermatozoa in assisted reproductive technologies. *Middle East Fertility Society Journal* 1996;1:128-133.
11. Zavos PM, **Correa JR**, Nosek D, Mohammadi F, Digenis GA. Assessment of new formulations of nonoxynol-9 coprecipitated with polyvinylpyrrolidone and iodine as possible vaginal contraceptives. *Fertility and Sterility* 1996;66:729-733.
12. **Correa JR**, Zarmakoupis-Zavos PN, Zavos PM. Improved recovery of frozen-thawed bovine spermatozoa selected via a standardized swim-up technique. *Archivos Latinoamericanos de Producción Animal* 1996;4:101-112.
13. **Correa JR**, Heersche, Jr. G, Zavos PM. Sperm membrane functional integrity and response of frozen-thawed bovine spermatozoa during the hypoosmotic swelling test incubation at varying temperatures. *Theriogenology* 1997;47:715-721.
14. Zavos PM, Zarmakoupis-Zavos PN, **Correa JR**, Abouabdalla M, Aslanis P. Variations in pregnancy rates following intrauterine insemination among infertility centers: can the inseminators make a difference? *Middle East Fertility Society Journal* 1997;2:24-29.
15. **Correa JR**, Zarmakoupis-Zavos PN, Zavos PM. Quantitative and qualitative characteristics of frozen-thawed bovine spermatozoa recovered via a conventional and a standardized swim-up technique. *Toboku Journal of Experimental Medicine* 1997;181:267-274.
16. **Correa JR**, Pace MM, Zavos PM. Relationships between frozen-thawed sperm characteristics assessed via the routine semen analysis, sperm functional tests and fertility of bulls in an artificial insemination program. *Theriogenology* 1997;48:721-731.
17. Zavos PM, Barnes FL, **Correa JR**, Zarmakoupis-Zavos PN, Tesarik J. Methods for isolation and purification of post-ejaculate human round spermatids for possible use in intracytoplasmic round spermatid injection. *Middle East Fertility Society Journal* 1997;2:147-150.

18. Zavos PM, **Correa JR**. Vaginal delivery of new formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone in rabbits: comparisons between two formulation-delivery systems. *Contraception* 1997;56:123-127.
19. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Effect of treatment of seminal viscosity difficulties with α -chymotrypsin on the recovery of spermatozoa for assisted reproductive technologies: comparisons between the SpermPrep™ filtration and Percoll gradient centrifugation methods. *Middle East Fertility Society Journal* 1997;2:223-229.
20. **Correa JR**. Sperm preparation substances-Toxic? *Fertility and Sterility* 1997;68:568-569.
21. Zavos PM, **Correa JR**, Antypas S, Zarmakoupis-Zavos PN, Zarmakoupis CN. The effects of seminal plasma from cigarette smokers on sperm viability and longevity. *Fertility and Sterility* 1998;69:425-429.*

*** Manuscript selected for Continued Medical Education (CME) reading**

22. Zavos PM, **Correa JR**, Karagounis CS, Ahparaki A, Phoroglou, Hicks CH, Zarmakoupis-Zavos PN. An electron microscope study of the axonemal ultrastructure in human spermatozoa from smoking and nonsmoking males. *Fertility and Sterility* 1998;69:430-434.
23. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Antisperm antibody treatment mode: levels of antisperm antibodies following incubation in TEST-Yolk buffer and filtration via the SpermPrep™ II method. *Fertility and Sterility* 1998;69:517-521.
24. **Correa JR**. Firm oysters year round? Activation of developmental programs in human oocytes. *Fertility and Sterility* 1998;70:169-171. *

***Article generated a commentary from the Editor, Dr. Paul G. McDonough**

25. **Correa JR**. Percutaneous vasal sperm aspiration and intrauterine insemination. *Fertility and Sterility* 1998;70:174-175.
26. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Assessment of a tablet drug delivery system incorporating nonoxynol-9 coprecipitated with polyvinylpyrrolidone in preventing the onset of pregnancy in rabbits. *Fertility and Sterility* 1998;69:768-773.
27. Zarmakoupis-Zavos PN, **Correa JR**, Aslanis P, Antypas S, Zavos PM. Occurrence of osmotic shock in human spermatozoa: its effects on the qualitative measurements of frozen-thawed spermatozoa. *Middle East Fertility Society Journal* 1998;3:66-72.
28. Zavos PM, **Correa JR**, Clark W, Zarmakoupis-Zavos PN. Sperm viability in human semen specimens cryostored at 5°C using the Bio-Tranz™ container system for semen transport. *Middle East Fertility Society Journal* 1998;3:325-329.

29. Zarmakoupis-Zavos PN, **Correa JR**, Clark W, Zavos PM. Outcome of in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) using human sperm prepared via a new standardized swim-up technique fit for office use. *Primary Care Update for Ob/Gyns* 1998 Jul 1;5(4):169.
30. Zavos PM, **Correa JR**, Rodriguez F, Zarmakoupis-Zavos PN. Viability of human semen specimens cryostored and transported at 5°C using the Bio-Tranz shipping system. *Primary Care Update for Ob/Gyns* 1998 Jul 1;5(4):170-171.
31. Zavos PM, **Correa JR**, Foster CL, Massey JB, Zarmakoupis-Zavos PN. Fertilization potential and qualitative characteristics of human spermatozoa after short-term cryostorage at 5°C in two different TEST-Yolk buffer preparations. *Toboku Journal of Experimental Medicine* 1998;184:143-152.
32. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Evaluation of techniques for the cryopreservation of washed spermatozoa: comparisons between Ham's F-10 and TEST-yolk media. *Toboku Journal of Experimental Medicine* 1998;184:277-284.
33. Zavos PM, Zarmakoupis-Zavos PN, **Correa JR**, Antypas S, Aslanis P, Zarmakoupis CN. The inability to produce seminal specimens at the time of seminal evaluation may reflect difficulties with sexual drive and deficient spermatogenic parameters. *Middle East Fertility Society Journal* 1999;4:53-57.
34. Zarmakoupis-Zavos PN, **Correa JR**, Zarmakoupis CN, Zavos PM. Multiple ejaculate collection via the use of a semen collection device at intercourse versus masturbation. *Middle East Fertility Society Journal* 1999;4:228-232.
35. **Correa-Pérez JR**. Advanced sperm analysis- a step in the right direction? *Fertility and Sterility* 1999;72:1150-1151.
36. Zavos PM, Aslanis P, Zarmakoupis CN, **Correa JR**, Zarmakoupis-Zavos PN. Development of a hyperosmotic shrinkage test to measure the functional integrity of the membrane of human round spermatids retrieved from testes for use in ICSI. *Middle East Fertility Society Journal* 2000;5:115-119.
37. Zavos PM, Abou-Abdallah M, Aslanis P, **Correa JR**, Zarmakoupis-Zavos PN. Use of the multi-ZSC one-step standardized swim-up method: recovery of high-quality spermatozoa for intrauterine insemination or other forms of assisted reproductive technologies. *Fertility and Sterility* 2000;74:834-835.
38. Zavos PM, Zarmakoupis-Zavos PN, **Correa JR**, Aslanis P, Zarmakoupis CN. Assessment of two devices for in vitro preparation of human sperm. *Archives of Andrology* 2000;45:85-90.
39. **Correa-Pérez JR**. Testing for "Life"-how predictable? *Fertility and Sterility* 2002;77:426-427.

40. **Correa-Pérez JR.** A critical decision threshold-the temperature. *Fertility and Sterility* 2002;77:640-641.
41. Zavos PM, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Precoital sexual stimulation and its effects on seminal characteristics. *Middle East Fertility Society Journal* 2003;8:69-73.
42. **Correa-Pérez JR**, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. The effect of colloid osmotic pressure in human spermatozoa exposed to hypoosmotic conditions. *Andrologia* 2003;35:117-120.*
*** Research nominated for the 5th Annual Royan International Research Award for the best five research papers in reproductive biomedicine**
43. **Correa-Pérez JR.** Smoking and sperm viability-a never ending story. *Fertility and Sterility* 2003;79:1469-1470.
44. **Correa-Pérez JR**, Fernández-Pelegrina R, Zavos PM. Isolation of sequential sperm subpopulations and achievement of morphological normalcy in teratozoospermic specimens processed via a multi-layer/swim-up method. *Andrologia* 2003;35:248-249.
45. **Correa-Pérez JR.** Sperm morphology and rate of blastomere cleavage: correlation? *Fertility and Sterility* 2003;80:674-676.
46. **Correa-Pérez JR**, Fernández-Pelegrina R. Optimal day for embryo transfer? *Fertility and Sterility* 2003;80:1070-1071.
47. **Correa-Pérez JR**, Fernández-Pelegrina R. Oversight, overlap, or not immediately relevant? *Fertility and Sterility* 2003;80:1540-1542. *
***Article generated a commentary from the Editor, Dr. Paul G. McDonough**
48. **Correa-Pérez JR**, Fernández-Pelegrina R, Aslanis P, Zavos PM. Sexual dysfunction and sperm count-association? *Fertility and Sterility* 2003;80:1542-1543.
49. **Correa-Pérez JR**, Fernández-Pelegrina R, Aslanis P, Zavos PM. Clinical management of men producing ejaculates characterized by high levels of dead sperm and altered seminal plasma factors consistent with epididymal necropermia. *Fertility and Sterility* 2004;81:1148-1150.
50. **Correa-Pérez JR.** Embryo transfer medium-hyaluronic acid in place of albumin? *Fertility and Sterility* 2004;81:1157-1158.
51. **Correa-Pérez JR**, Fernández-Pelegrina R, Zavos PM. Development of differential sperm tail swelling patterns during exposure of human spermatozoa to hypoosmotic environments regulated by a colloid osmotic pressure effect. *Andrologia* 2004;36:84-86.*

***Research nominated for the 6th Annual Royan International Research Award for the best five research papers in reproductive biomedicine, Royan Institute, Tehran, IRAN**

52. **Correa-Pérez JR**, Fernández-Pelegri R. The glitter of the correlation coefficient. *Fertility and Sterility* 2004;81:1715-1717. *
- *Article generated a commentary from the Editor, Dr. Paul G. McDonough**
53. **Correa-Pérez JR**. Prognostic value of pronuclear morphology. *Fertility and Sterility* 2004;82:258-260.
54. **Correa-Pérez JR**. Occurrence of non-persistent hematospermia after a prolonged period of daily ejaculatory intensity longer than 3 weeks. *Journal of Assisted Reproduction and Genetics* 2004;21:341-342.
55. **Correa-Pérez JR**, Fernández-Pelegri R. Air transfer in the catheter--good or bad? *Fertility and Sterility* 2005;83:520.-521.
56. **Correa-Pérez JR**. Intrasubject abstinence and quality of sperm. *Fertility and Sterility* 2005;83:1588-1590.
57. **Correa-Pérez JR**. The intangible female factor affecting the success of vasovasostomy? *Fertility and Sterility* 2005;83:1886-1887.

Abstracts Presented

1. Zavos PM, Kaftani DJ, **Correa JR**. Improvements and short-term viability of mouse epididymal spermatozoa recovered through the SpermPrep™ filtration method. The 18th Annual Meeting of the American Society of Andrology, Tampa, Florida, April 15-16, 1993. *Program Supplement*, P-36 (*Abstract #56*).
2. **Correa JR**, Zavos PM. The hypoosmotic swelling test: Its employment as an assay to evaluate the functional integrity of frozen-thawed bovine spermatozoa. The 19th Annual Meeting of the American Society of Andrology, Springfield, Illinois, March 4-7, 1994. *Program Supplement*, P-42 (*Abstract #84*).
3. **Correa JR**, Zavos PM. The effect of thawing temperatures on the occurrence of opisthosmotic shock on frozen-thawed bovine spermatozoa. The 20th Annual Meeting of the American Society of Andrology, Raleigh, North Carolina, March 31-April 4, 1995. *Program Supplement*, P-33 (*Abstract #37*).
4. **Correa JR**, Zavos PM. The effects of thawing and holding temperatures during deglycerolization of frozen-thawed bovine spermatozoa on sperm viability and opisthosmotic shock. The 20th Annual Meeting of the American Society of Andrology, Raleigh, North Carolina, March 31-April 4, 1995. *Program Supplement*, P-33 (*Abstract #38*).

5. Zavos PM, **Correa JR**, Noskova D, Mohammadi F, Digenis GA. Studies in the development and testing of new formulations of polyvinylpyrrolidone (PVP) coprecipitated with nonoxynol-9 (N-9) and iodine as possible vaginal contraceptives. The 11th Annual Meeting of the European Society of Human Reproduction-Embryology (ESHRE), Hamburg, Germany, June 28-July 1, 1995. *Human Reproduction 1995;10(Abtract book 2):79-80. (Oral Presentation. Abstract # 164).*
6. Zavos PM, **Correa JR**, Noskova D, Mohammadi F, Digenis GA. The development of new formulations of nonoxynol-9 (N-9) coprecipitated with polyvinylpyrrolidone (PVP) as possible vaginal contraceptives. The 51st Annual Meeting of the American Society for Reproductive Medicine (formerly American Fertility Society), Seattle, Washington, October 7-12, 1995. *Program Supplement, p. S74 (Oral Presentation O-151).*
7. Zavos PM, **Correa JR**, Zarmakoupis PN, Kofinas GD, Abouabdallah M. Measurements of the sperm motility index via the sperm quality analyzer and its relationship to other sperm qualitative parameters. The 2nd Annual Meeting of the Middle East Fertility Society, Alexandria, Egypt, October 11-14, 1995.
8. **Correa JR**, Zavos PM. Preparation of frozen-thawed bovine spermatozoa via various sperm selection techniques employed in assisted reproductive technologies. The 21st Annual Meeting of the American Society of Andrology, Minneapolis, Minnesota, April 25-29, 1996. *Program Supplement, P-54 (Abstract # 128).*
9. **Correa JR**, Zavos PM. Response of frozen-thawed bovine spermatozoa to the hypoosmotic swelling test at various temperatures. The 21st Annual Meeting of the American Society of Andrology, Minneapolis, Minnesota, April 25-29, 1996. *Program Supplement, P-54 (Abstract # 129).*
10. **Correa JR**, Zavos PM. Dilution associated changes in osmotic pressure of the cryopreservation medium during washing of frozen-thawed bovine spermatozoa. The 21st Annual Meeting of the American Society of Andrology, Minneapolis, Minnesota, April 25-29, 1996. *Program Supplement , P-55 (Abstract # 130).*
11. **Correa JR**, Zavos PM. Qualitative and quantitative characteristics of frozen-thawed bovine spermatozoa recovered via a conventional and a standardized swim-up technique. The 12th Annual Meeting of the European Society of Human Reproduction-Embryology (ESHRE), Maastricht, The Netherlands, June 30-July 3, 1996.
12. Kearl R, **Correa JR**, Hicks CL, Zavos PM. Employment of peptide blockers in inhibiting antisperm antibodies to human spermatozoa. The 12th Annual Meeting of the European Society of Human Reproduction-Embryology (ESHRE), Maastricht, The Netherlands, June 30-July 3, 1996. *Program Supplement, p. 115 (P-041).*
13. Zavos PM, **Correa JR**. Vaginal delivery of new formulations of nonoxynol-9 coprecipitated with polyvinylpyrrolidone: assessment of two formulation-delivery systems on the onset of pregnancy in rabbits. The 22nd Annual Meeting of the

American Society of Andrology, February 23-25, 1997, Baltimore, Maryland. *Program Supplement*, P-51 (*Abstract # 105*).

14. Zavos PM, **Correa JR**. Assessment of spermicidal efficacy of new formulations of nonoxynol-9 co-precipitated with polyvinylpyrrolidone in rabbits: comparisons between two delivery systems. The 22nd Annual Meeting of the American Society of Andrology, February 25-27, 1997, Baltimore, Maryland. *Program Supplement*, P-51 (*Abstract # 106*).
15. Zavos PM, **Correa JR**, Clark W, Zarmakoupis-Zavos PN. Outcome of in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI) using human sperm prepared via a new standardized swim-up technique fit for office use. The American College of Obstetricians and Gynecologists (ACOG) 46th Annual Clinical Meeting, May 9-13, 1998, New Orleans, Louisiana.
16. Zarmakoupis-Zavos PN, **Correa JR**, Rodriguez F, Zavos PM. Viability of human semen specimens cryostored and transported at 5°C using the Bio-Tranz™ shipper system. The American College of Obstetricians and Gynecologists (ACOG) 46th Annual Clinical Meeting, May 9-13, 1998, New Orleans, Louisiana.
17. Zavos PM, **Correa JR**, Zarmakoupis-Zavos PN. Quantitative and qualitative measurements of human spermatozoa recovered via two commercially available methods: comparative measurements. The 54th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 4-9, 1998, San Francisco, California. *Program Supplement*, P. S96 (*Oral Presentation # O-258*).
18. Fernández Pelegrina F, Torres O, **Correa JR**. Assisted zona hatching (AZH) opens a window that enhances embryo implantation and other pregnancy establishment mechanisms. The 54th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 4-9, 1998, San Francisco, California, *Program Supplement P. S359 (Abstract # P-716)*.
19. Zavos PM, Antypas S, Aslanis P, Zarmakoupis CN, **Correa JR**, Zarmakoupis-Zavos PN. Development of assays to measure the functional integrity of the membrane of human immature spermatozoa recovered from testes for use in ICSI. The 54th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 4-9, 1998, San Francisco, California., *Program Supplement P. S352 (Abstract # P-737)*.
20. Aslanis P, **Correa JR**, Zarmakoupis-Zavos PN, Zavos PM. Use of the multi-ZSCTM one-step standardized swim-up method: recovery of high quality spermatozoa for IUI or other forms of assisted reproductive technologies (ART's). Panhellenic Andrology Conference, Athens, Greece, November 13-15, 1998.
21. Abou-Abdallah, **Correa JR**, Zarmakoupis-Zavos PN, Zavos PM. Use of the multi-ZSCTM one-step standardized swim-up method: recovery of high quality spermatozoa for IUI or other forms of assisted reproductive technologies (ART's).

The 5th Annual Meeting of the Middle East Fertility Society, Amman, Jordan, November 18-20, 1998.

22. Zavos PM, Correa JR , Aslanis P, Zarmakoupis-Zavos PN. Recovery of high quality spermatozoa for IUI or other forms of assisted reproductive technologies (ART's): employment of the multi-ZSC™ one-step standardized swim-up method. The Annual Meeting of the American Society of Andrology, Louisville, Kentucky, April 11-13, 1999.
23. **Correa-Pérez JR**, Torres-Santiago O, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. Sperm quantitative/qualitative characteristics distribution of normozoospermic and teratozoospermic specimens in a multi-layer swim-up column. The 6th Annual Meeting of the Middle East Fertility Society, Sharm El Sheikh, Egypt, November 24-26, 1999.
24. Zavos PM, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. Recovery of frozen-thawed bovine spermatozoa via a conventional and a standardized swim-up technique. The 25th Annual Meeting of the American Society of Andrology, Boston, MA, USA, April 7-11, 2000.
25. **Correa-Pérez JR**, Torres-Santiago O, Fernández Pelegrina R, Zavos PM. Sperm characteristics recovered from teratozoospermic specimens using a multi-layer swim-up column. The 25th Annual Meeting of the American Society of Andrology, Boston, MA, USA, April 7-11, 2000.
26. **Correa-Pérez JR**, Torres-Santiago O, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. Rheologic behavior of spermatozoa exposed to hypoosmotic conditions at varying oncotic pressure environments: possible protective mechanisms against sperm swelling by the addition of protein supplements. The 56th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 21-25, 2000, San Diego, California, *Program Supplement P. S106 (Abstract # P-035)*.
27. Zavos PM, Kaskar K, **Correa JR**, Sikka SC, Zarmakoupis-Zavos PN. Seminal characteristics of men of different age groups: Is there an aging effect? The 56th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 21-25, 2000, San Diego, California, *Program Supplement P. S57 (Oral Presentation # O-150)*.
28. **Correa-Pérez JR**, Torres-Santiago O, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. Sperm quantitative/qualitative characteristics distribution of normozoospermic and teratozoospermic specimens in a multi-layer swim-up column. The 56th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 21-25, 2000, San Diego, California, General Program P. 97.
29. **Correa-Pérez JR**, Torres-Santiago O, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. Recovery of sperm subpopulations in a multi-layer swim-up

column: distribution of morphological characteristics from normozoospermic and teratozoospermic semen specimens. The 56th Annual Meeting of the American Society for Reproductive Medicine (ASRM), October 21-25, 2000, San Diego, California, General Program P. 97.

30. Zavos PM, Aslanis P, Zarmakoupis CN, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Comparison between couples with different smoking habits: Male and female sexual behavior. The 4th Panhellenic Andrology Meeting, Athens, Greece, November 10-12, 2000.
31. Zavos PM, Aslanis P, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. The aging effect of men on sexual behavior and seminal characteristics: Fact or fiction? The 4th Panhellenic Andrology Meeting, Athens, Greece, November 10-12, 2000.
32. Zavos PM, Kaskar K, **Correa JR**, Abou-Abdallah, Zarmakoupis-Zavos PN. Is there an aging effect on sperm parameters and sexual behavior of men of different age groups. The 7th Annual Meeting of the Middle East Fertility Society, Beirut, Lebanon, November 15-18, 2000.
33. Zavos PM, Aslanis P, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. The aging effect of men on sexual behavior and seminal profiles: fact or fiction? The VII International Congress of Andrology, Montreal, Canada, June 15-19, 2001.
34. Zavos PM, Zarmakoupis CN, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Comparison between couples with different smoking habits: Male and female sexual behavior. The VII International Congress of Andrology, Montreal, Canada, June 15-19, 2001.
35. Zavos PM, **Correa JR**, Sultan AM, Kaskar K, Zarmakoupis-Zavos PN. How predictive is the mock cycle during IVF: Should it be performed? The VII International Congress of Andrology, Montreal, Canada, June 15-19, 2001.
36. Zavos PM, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. Seminal characteristics of men of various age groups: Is there an aging effect? The 17th Annual Meeting of the European Society for Human Reproduction and Embryology, Lausanne, Switzerland, July 1-4, 2001.
37. Zavos PM, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. Variations of seminal characteristics in young and elderly men: Is the aging effect real? The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. S137 (Abstract # P-076)*.
38. Zavos PM, **Correa JR**, Sultan AM, Kaskar K, Zarmakoupis-Zavos PN. How predictive is the mock cycle during IVF: Should it be performed? The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. 139 (Abstract # P-080)*.

39. Zavos PM, **Correa JR**, Aslanis P, Zarmakoupis-Zavos PN. The impact of cigarette smoking on male and female sexual behavior: Who sets the pace? The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. S224 (Abstract # P-341)*.
40. **Correa-Pérez JR**, Fernández-Pelegrina R, Zarmakoupis-Zavos PN, Zavos PM. Distribution of sperm quantitative/qualitative characteristics from normozoospermic and teratozoospermic specimens in a multi-layer swim-up column. The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. S241 (Abstract # P-386)*.
41. Zavos PM, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Differences in seminal parameters between the first and second seminal collection: Can the semen collection method make a difference? The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. S241 (Abstract # P-388)*.
42. Zavos PM, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Time dependent pattern of activity of the spermicide Nonoxynol-9 on sperm qualitative characteristics. The 57th Annual Meeting of the American Society for Reproductive Medicine, Orlando, Florida, October 20-25, 2001, *Program Supplement P. S263 (Abstract # P-453)*.
43. Zavos PM, **Correa JR**, Kaskar K, Zarmakoupis-Zavos PN. Differences in seminal parameters between the first and second seminal collection: Can the semen collection method make a difference? 8th Annual Meeting of the Middle East Fertility Society, Bahrain, Egypt, November 7-10, 2001.
44. Zavos PM, Kaskar K, **Correa JR**, Zarmakoupis-Zavos PN. Variations of seminal characteristics in young and elderly men: Is the aging effect real? 8th Annual Meeting of the Middle East Fertility Society, Bahrain, Egypt, November 7-10, 2001.
45. Zavos PM, **Correa JR**, Sultan AM, Kaskar K, Zarmakoupis-Zavos PN. How predictive is the mock cycle during IVF: Should it be performed? 8th Annual Meeting of the Middle East Fertility Society, Bahrain, Egypt, November 7-10, 2001.
46. Zavos PM, **Correa JR**, Aslanis P, Kaskar K, Zarmakoupis-Zavos PN. Sperm viability in human semen specimens cryostored at 5°C using the Bio-TranzTM container system for semen transport. The 58th Annual Meeting of the American Society for Reproductive Medicine, Seattle, Washington, October 12-17, 2002, *Program Supplement P. S336 (Abstract # P-363)*.
47. **Correa-Pérez JR**, Fernández-Pelegrina R, Zavos PM. Hypoosmotic swelling patterns in human spermatozoa: effects of colloid osmotic pressure conditions. The 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, Texas, October 11-15, 2003, *Vol. 80 Sup. 3, Program Supplement P. S205-206 (Abstract # P-251)*.

48. **Correa-Pérez JR**, Fernández-Pelegrina R, Córdova-Claudio MJ, Kaskar K, Zavos PM. Improvement of morphological deficiencies according to the degree of teratozoospermia: is it possible to reach comparable levels to normozoospermic semen specimens? The 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, Texas, October 11-15, 2003, *Vol. 80 Sup. 3, Program Supplement P. S211-212 (Abstract # P-269)*.
49. Zavos PM, Abou-Abdallah M, Aslanis P, Antypas S, **Correa JR**, Kaskar K, Zarmakoupis PN. Can cigarette smoking affect sex drive? More likely for men than women. The 10th Annual Meeting of the Middle East Fertility Society, Beirut, December 10-13, 2003.
50. **Correa-Pérez JR**, Fernández-Pelegrina R, González-Rodríguez C, Correa-Pérez JL, Corchado-Vargas F, Córdova MJ. Influence of catheter, syringe and inclusion of air-fluid columns on the release of embryos in a continuous media in vitro model. The 60th Annual Meeting of the American Society for Reproductive Medicine, Philadelphia, Pennsylvania, October 16-20, 2004, *Vol. 82 Sup.2, Program Supplement P. S259 (Abstract # P-348)*.
51. **Correa-Pérez JR**, Fernández-Pelegrina R, Kaskar K, Zavos PM. Identification of deficient sperm characteristics from the semen analysis and their contribution to the diagnosis of male factor. The 11th Annual Meeting of the Middle East Fertility Society (MEFS), December 1-3, Amman, Jordan. (*Selected for Oral Presentation*).
52. **Correa-Pérez JR**, Fernández Pelegrina R, Kaskar K, Zavos PM. Outcome of intracytoplasmic sperm injection in cases of epididymal necrospermia. Conjoint meeting of the American Society for Reproductive Medicine 61st Annual Meeting and the Canadian Fertility and Andrology Society 51st Annual Meeting, Palais de Congrès, Montreal, Quebec, Canada, October 15-19, 2005, (Abstract # P-161).
53. Zavos PM, **Correa-Perez JR**, Kaskar K, Koundouros S, Zarmakoupis-Zavos P. Fecundity of human semen specimens cryostored and transported at 5°C using the Bio-Tranz shipping system. Conjoint meeting of the American Society for Reproductive Medicine 61st Annual Meeting and the Canadian Fertility and Andrology Society 51st Annual Meeting, Palais de Congrès, Montreal, Quebec, Canada, October 15-19, 2005, (Abstract # P-166).

Theses and Dissertations Completed

M.S.-The hypoosmotic swelling test: Its employment as an assay to evaluate the functional integrity of the frozen-thawed bovine sperm membrane. University of Kentucky, 1994.

Ph.D.-Factors influencing the post-thaw status of bovine spermatozoa: relationships between sperm qualitative measurements, membrane functional status and fertilizing

ability of spermatozoa employed in an artificial insemination program. University of Kentucky, 1996.