

## CURRICULUM VITAE

Kathleen A. Miller

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## WORK EXPERIENCE

### **VICE PRESIDENT; MT LABORATORY SOLUTIONS**

9/2009-Present

A division of MedTech For Solutions, Inc  
475 Park Avenue South  
New York, NY 10016  
[www.medtech4solutions.com](http://www.medtech4solutions.com)

A full-service healthcare consultancy dedicated exclusively to the Assisted Reproduction Technology (ART) laboratory delivering strategic tools, innovative solutions and cutting edge technology to meet the specific needs of your ART center. Based on over 20 years of experience in the ART industry, we can share strategies that have been implemented successfully elsewhere and define the common characteristics of successful ART centers. Our approach offers the customization needed to execute the industry's best practices into your ART laboratory and maximize success for your ART program.

### **OFF-SITE CONSULTANT LABORATORY DIRECTOR; IVF FLORIDA REPRODUCTIVE ASSOCIATES**

6/11-PRESENT

#### **IVF FLORIDA REPRODUCTIVE ASSOCIATES**

2960 North State Road 7, Suite 300  
Margate, Florida 33063

**Responsible** for all functions of large successful private practice clinical *in vitro* fertilization laboratories. Clinical management responsibilities include IVF, Assisted Hatching, Intracytoplasmic Sperm Injection (ICSI), Testicular and Epididymal Sperm Preparation, Embryo Biopsy, Extended Culture, Pre-implantation Genetics, Embryo Cryogenics, Andrology, laboratory, and the Quality Assurance and Quality Control Programs for the laboratories.

### **OFF-SITE CONSULTANT LABORATORY DIRECTOR; UNIVERSITY OF ALABAMA-BIRMINGHAM**

3/11-PRESENT

#### **UNIVERSITY OF ALABAMA-BIRMINGHAM KIRKLAN CLINIC**

2000 6th Avenue South  
Birmingham, AL 35233

**Responsible** for managing and operating the *in vitro* fertilization laboratory for an academic university-based ART practice.

### **LABORATORY CONSULTANT; SAGE IVF COOPER SURGICAL**

3/10-PRESENT

95 Corporate Drive  
Trumbull, CT 06611

**Responsible** for providing embryology technical support to a company dedicated to developing and marketing products for the IVF community for more than 10 years.

### **OFF-SITE CONSULTANT LABORATORY DIRECTOR; BILLINGS CLINIC**

2/10-PRESENT

#### **Billings Clinic**

2800 10th Avenue North  
Billings, MT 59101

**Responsible** for creating the first *in vitro* fertilization laboratory in Montana for a multi-specialty physicians' clinic providing inpatient and outpatient care serving people in a four-state region.

**CONSULTANT LABORATORY DIRECTOR; EMBRYOLOGY AND ANDROLOGY LABORATORIES**

1/10-PRESENT

**Genesis Fertility Centre**

1367 West Broadway Suite 300  
Vancouver, British Columbia, Canada

**Responsible** for all functions of one of Canada's largest (800 cycles) and most successful private practice clinical *in vitro* fertilization laboratories. Genesis Fertility Centre is dedicated to providing single embryo transfer therapy to patient undergoing *in vitro* fertilization treatment. Clinical management responsibilities include IVF, Assisted Hatching, Intracytoplasmic Sperm Injection (ICSI), Testicular and Epididymal Sperm Preparation, Embryo Biopsy, Extended Culture, Pre-implantation Genetics, Embryo Cryogenics, Andrology, laboratory, and the Quality Assurance and Quality Control Programs for the laboratories.

**LABORATORY CONSULTANT**

11/09-PRESENT

**Advanced Fertility Center**

30 Tower Court  
Gurnee, Illinois

**Responsible** for overseeing all functions of a clinical in vitro fertilization laboratory (300 – 350 cycles) for a private practice.

**EXPERT CONTENT ADVISOR; BIODIGITAL SYSTEMS**

9/2005-PRESENT

594 Broadway Avenue Suite 606  
New York, New York 10012  
www.biodigitalsystems.com

Biodigital Systems is a leading developer of state of the art biomedical visualization systems. Specializing in creating 3D animation, anatomically accurate medical simulation, interactive training tools and medical information systems. I lead the reproductive and obstetrics and gynecology development section.

**LABORATORY CONSULTANT; GENE SECURITY NETWORK**

2/10-7/11

2686 Middlefield Road Suite C  
Redwood City, CA 94063

**Responsible** for providing embryology technical support to a reference laboratory providing aneuploidy screening across all 24 chromosomes and testing of single gene disorders in parallel with aneuploidy screening.

**DIRECTOR; EMBRYOLOGY LABORATORY**

10/1999-9/2009

**Reproductive Medicine Associates of NJ**

111 Madison Avenue; Suite 100; Morristown, NJ 07962

**Created** and was responsible for all functions of one of the world's largest and most successful private practice clinical in vitro fertilization laboratory. Clinical management responsibilities include IVF, Assisted Hatching, Intracytoplasmic Sperm Injection (ICSI), Testicular and Epididymal Sperm Preparation, Embryo Biopsy, Extended Culture, Pre-implantation Genetics, Embryo Cryogenics, Andrology, Endocrine laboratory, and the Quality Assurance and Quality Control Programs for the laboratory.

During my tenure:

- Maintained clinical pregnancy rates at 50% or higher
- Controlled multiple pregnancy rates with an aggressive blastocyst transfer and cryogenics program
- Developed highly sophisticated polar body, blastomere and trophoctoderm biopsy techniques to validate a 24 chromosome microarray protocol
- Developed and administrated a large WIRB approved research tissue collection program
- Trained and managed a large embryology, research and genetics laboratory team (at any given time over 12 employees)
- Co-administrated the ART program with a large physician staff (at any given time over 10 physicians)
- Co-administrated the practice with a senior management team
- Obtained "certification with distinction" by The College of American Pathologists and have maintained this certification with no deficiencies for 10 years
- Obtained FDA certification
- Primary interface for ISO certification
- Fiscally managed laboratory expenses below established yearly budgets
- Assisted with the validation of SART/CDC data reporting
- Started and marketed RMA Genetics Reference laboratory
- Mentored and educated medical students, residents and graduate students

- Primary interface between embryology laboratory, clinical research team and molecular biology team
- One of three lead investigators on the majority of RMA research projects
- Lead investigator on over a dozen industry supported research or validation studies
- Co-author on over 60 peer-reviewed papers and abstracts
- Co-Author of Prize Paper Of The 2007 Annual Meeting of the American Society of Reproductive Medicine

**DIRECTOR; EMBRYOLOGY LABORATORY**

10/2000- 9/2003

**Advanced Fertility & Reproductive Endocrinology Institute**

2728 Sunset Boulevard; West Columbia, SC 29169

**Created** and was responsible for all functions of a successful private practice clinical in vitro fertilization laboratory with clinical pregnancy rates consistently at 50% or higher. Clinical management responsibilities include IVF, Assisted Hatching, Intracytoplasmic Sperm Injection (ICSI), Testicular and Epididymal Sperm Preparation, Embryo Biopsy, Pre-implantation Genetics, Embryo Cryogenics, Andrology, Endocrine laboratory, and the Quality Assurance and Quality Control Programs for the laboratory.

**DIRECTOR; ASSISTED REPRODUCTION LABORATORIES**

3/1996 – 10/1999

**Southeastern Fertility Center**

Mt. Pleasant South Carolina

**Department of Obstetrics and Gynecology**

Medical University of South Carolina; Charleston, South Carolina

**Department of Obstetrics and Gynecology**

School of Medicine; University of South Carolina; Columbia South Carolina

**Created** and was responsible for all functions of a clinical in vitro fertilization laboratory (300 – 350 cycles) for a private practice, two medical universities and three satellite programs. Clinical duties include IVF, Assisted Hatching, Intracytoplasmic Sperm Injection (ICSI), Testicular and Epididymal Sperm Preparation, Embryo Biopsy, Pre-implantation Genetics, Embryo Cryogenics, Andrology, Endocrine laboratory, and the Quality Assurance and Quality Control Programs for the laboratory. Obtained certification by CAP for the Embryology and by COLA for the Endocrinology-Andrology Laboratories during my tenure.

**SUPERVISOR; IVF AND ANDROLOGY LABORATORIES**

7/1992- 2/1996

**Bowman Gray School of Medicine of Wake Forest University**

Department of Obstetrics & Gynecology; Section on Reproductive Endocrinology;  
Winston-Salem North Carolina 27157

Responsible for all functions of a clinical in vitro fertilization laboratory and a basic science research laboratory in reproductive biology. Clinical duties include IVF, Embryo Cryogenics, Andrology, RIA laboratory, Sperm and Donor Bank, the Quality Assurance and Quality Control Programs for the laboratory, and the Environmental Health and Safety Programs for the laboratory, the Department of Obstetrics and Gynecology, and the Medical Center. Research interests include the effect of endometriosis on fertilization and embryo development and the effect of sperm antibodies on fertilization. Obtained certification by CAP for the Embryology and Andrology Laboratories and by HCFA for the Endocrinology Laboratory during my tenure.

**EMBRYOLOGIST & ANDROLOGIST**

8/1990-7/92

**University Hospitals of Cleveland**

In Vitro Fertilization, Embryo Transfer and Andrology Laboratories;  
Case Western Reserve University; Cleveland, Ohio 44106

Responsible for most functions of a clinical and basic science research laboratory in reproductive biology. Duties included: IVF and GIFT including micromanipulation (PZD, SUZI), insemination sample preparation (husband or donor by swim-up, simple wash or Percoll), donor sperm banking, andrology (HSPA, sperm antibodies, sex selection, semen analysis, morphology), mouse two-cell assay and IVF, co-culture of human tubal (epithelial) cells, sperm chromatin structure assay.

## **RESEARCH ASSISTANT**

7/89-7/90

### **Ohio State University**

Department of Agronomy, OARDC; Wooster, Ohio 44691

Responsible for all functions of laboratory researching the relationship between zein protein development and concentration and endosperm hardness in *Zea mays*. Excels in: experimental design and implementation, process and analysis of data, IEF, microcomputers, sample collection and preparation, protein extraction, SDS-PAGE electrophoresis, spectrophotometric assay, tissue culture, molecular biological techniques including DNA and RNA sequencing, RFLP, DNA hybridizations, Northern, Western, and Southern blots.

## **RESEARCH ASSISTANT II**

1/84-9/87

### **Case Western Reserve University**

Department of Medicine; Division of Hematology & Oncology; Cleveland Ohio 44106

Responsible for most functions of a laboratory researching chemical leukemogenesis. Proficient in: recordkeeping, inventory control, stock solution preparation, equipment maintenance, process, analysis, and recording of data, the guidance and training of new personnel including research assistants, research fellows, and undergraduate students, tissue culture, bioassays & enzyme assays, animal experimentation including *transgenic* micromanipulation procedures, micro and molecular biological technique including plasmid vector construction, transformation, and transfection, clonogenic assays, HPLC & spectrophotometric assays, radioactive isotopes, and electrophoresis.

## **EDUCATION, TRAINING, & CERTIFICATION**

2010	PhD Candidate, Epidemiology and Global Health Sciences Program, Nova Southeastern University, Ft. Lauderdale, FL. Expected Graduation: December 2012
1996	CAP and SART recognized Embryology Laboratory Director
1996	Board Certified, Embryology & Andrology, American Board of Bioanalysis
1996	The Gamete and Embryo Micromanipulation Workshop, The Gamete and Embryo Research Laboratory, The Institute for Reproductive Medicine and Science, Saint Barnabas Medical Center, Vail Colorado.
1994	Supervisor of Clinical Laboratories, American Board of Bioanalysis
1994	Environmental Health and Safety Team Leader, Bowman Gray School of Medicine of Wake Forest University, Winston-Salem North Carolina
1993	Principles of Proper Laboratory Animal Use in Teaching and Research, Wake Forest University, Winston-Salem North Carolina
10/92	Semenology Training, Merck & Co., University of California, Davis
12/83	Kent State University, Kent, Ohio Masters Degree Biological Sciences concentration Molecular Biology
5/82	Catholic University of America, Washington, DC Bachelors Degree Major & Baccalaureate Exam: Biological Science Minor: French
6/79	Revere High School, Richfield, Ohio High School Diploma

## **PUBLICATIONS**

### Abstracts

1. Trey JE, **Miller K**, Benjamin E, Gerson SL. Role of DNA repair enzymes in susceptibility of bone marrow to leukemogenic effects of nitrosoureas. *Blood* 66:123, 1985
2. Gerson SL, **Miller K**, Berger NA. O<sup>6</sup> alkylguanine-DNA alkyltransferase in human myeloid cells. *American Association Cancer Research* 23:102, 1985

3. Gerson SL, Trey SE, **Miller K**. Modulation of nitrosourea resistance in myeloid leukemias. *Blood* 68:223, 1986
4. Gerson SL, Trey JE, **Miller K**. O<sup>6</sup> methylguanine can overcome nitrosourea resistance of tumor cells. *Clinical Research* 34:563, 1986
5. **Miller K**, Deaton JL, Pittaway DE. The effect of serum from patients with endometriosis on fertilization and early embryonic development in a murine in vitro fertilization (IVF) model. The American Fertility Society Annual Meeting, Montreal, Canada, October 1993
6. Pittaway DE, **Miller K**, Barnes K. Clinical evaluation of CA-125 concentrations as a prognostic factor for pregnancy in infertile women with surgically treated endometriosis. *International Journal of Cancer Research and Treatment* 13:5B:1752, 1993
7. Pittaway DE, **Miller K**, Barnes K. Evaluation of a new automated enzyme immunoassay for the detection of CA-125 in women with endometriosis. *International Journal of Cancer Research and Treatment* 13:5B:1752, 1993
8. Dempsey RA, **Miller KA**, Deaton JL. Serum from women with polycystic ovarian disease inhibits fertilization and embryonic development in the murine in vitro fertilization (IVF) model. Society for Gynecologic Investigation 41st Annual Scientific Meeting, Chicago, Illinois, March 1994
9. **Miller KA**, Deaton JL, Pittaway DE. The effect of CA 125 concentration in serum from infertile women with endometriosis on fertilization and early embryonic development in the murine in vitro fertilization (IVF) model. Oral presentation at the American Fertility Society Annual Meeting, San Antonio, Texas, 1994.
10. Pittaway DE, **Miller K**, Barnes K. Evaluation of CA 125 concentrations as a prognostic factor in infertile women with surgically treated endometriosis: a comparison of three assays for CA 125. The American Fertility Society Annual Meeting, San Antonio, Texas, 1994.
11. Pittaway DE, Rondonine D, Barnes K, **Miller K**, Grant D. Poor prognostic factors for pregnancy in infertile women with surgically treated endometriosis. The American Society of Reproductive Medicine Annual Meeting, Seattle, Washington, 1995.
12. **Miller K**, Deaton JL, Pittaway DE. Elevated serum CA 125 concentration on the day of hCG administration is a predictor of pregnancy (PG) with in vitro fertilization (IVF). Poster Presentation at the American Society of Reproductive Medicine, Seattle, Washington 1995.
13. **Miller KA**, Patton GW, Queenan JT. The Performance of Sub-cutaneously Injected Fertinex When Utilized as The Sole Gonadotropin for In Vitro Fertilization Stimulation. Oral Presentation at College of Reproductive Biology Southern Region Meeting, San Antonio, Texas, August 1997.
14. **Miller KA**, Patton GW, Queenan JT. The Outgrowth of Supernumerary Embryos After Embryo Transfer Is Not Predictive of Pregnancy Outcome. Poster Presentation at the American Society of Reproductive Medicine, Cincinnati, Ohio 1997.
15. **Miller KA**, Patton GW, Queenan JT. A Prospective Comparison of Percoll and Enhance-S Plus Cell Isolation Media for Sperm Processing in ART. Poster Presentation at the American Society of Reproductive Medicine, Cincinnati, Ohio 1997.
16. **Miller KA**, Patton GW, Queenan JT. A Comparison Between the Frydman Soft/TDT Catheters and the Wallace/Tomcat Catheters for Embryo Transfer in a Human IVF Program. Poster Presentation at Treatment of Infertility: The New Frontiers. Boca Raton, Florida January 1998.
17. **Miller KA**, Patton GW, Queenan JT. Pregnancy Rates Are Higher in Patients Where Embryo Selection Can be Utilized. Poster Presentation at the American Society of Reproductive Medicine, San Francisco 1998.
18. Behr B., Fisch JD, Milki AA, Racowski C, **Miller K**, Pool TB. Blastocyst Transfer is Associated with an Increased Incidence of Monozygotic Twinning. Presentation at European Society of Human Reproduction and Embryology, 1999, Tours France
19. Maguire E, **Miller KA**, Roudebush WE. Distribution of the Platelet-Activating Factor Receptor Between Normal and Abnormal (Low Motility) Spermatozoa. Prize Paper Nomination, Oral Presentation at the American Society of Reproductive Medicine, Toronto 1999.
20. **Miller KA**, Patton GW. The Utilization of ICSI for Male Factor Infertility Does Not Affect Fresh Blastocyst Transfer Pregnancy Rates. Poster Presentation at the American Society of Reproductive Medicine, Toronto 1999.
21. **Miller KA**, Quinn P, Patton GW. A Simplified Method For Thawing Human Zygotes and Cleaved Embryos. Accepted but not presented; The American Society of Reproductive Medicine, Toronto 1999.
22. Quinn P, **Miller K**. Demonstration of a 12 month shelf life for human embryo cryopreservation media. Proceedings of International Symposium on ART and the Human Blastocyst, Serono Symposia USA, Dana Point, California, March 30 - April 2, 2000.
23. Patton G, Kaufmann R, **Miller K**. Blastocyst transfer in high and low ovarian responders. Abstract of the 58th Annual Meeting of the American Society for Reproductive Medicine, San Diego, CA, October 2000.
24. **Miller KA**, Quinn P, Elkind-Hirsch KE, Masterson KR, Scott RT. Are Media To Blame For Embryo Quality On Day 3? Poster presentation at Pacific Coast Reproductive Society 2003 Annual Meeting, Rancho Mirage, California.

25. **Miller KA**, Elkind-Hirsch KE, Benson MR, Bergh PA, Drews MR, Scott RT. A new Follicle Aspiration Needle is Equally Effective and Tolerated As The Standard Needle Used For IVF. Poster presentation at Pacific Coast Reproductive Society 2003 Annual Meeting, Rancho Mirage, California.
26. **Miller KA**, Elkind-Hirsch, KE, Bergh, PA, Scott, RT A history of failed blastocyst-stage embryo transfer does not diminish the beneficial effect of blastocyst transfer in a subsequent cycle. Abstract of the 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, TX, October 11-15, 2003
27. **Miller KA**, Elkind-Hirsch KE, Scott, RT. Availability of supernumerary embryos allows meaningful selection even at the blastocyst stage. Abstract of the 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, TX, October 11-15, 2003.
28. **Miller KA**, Elkind-Hirsch KE, Bauman B, Bergh PA, Scott RT. The risk of monozygotic twinning in an in vitro fertilization cycle (IVF) may be intrinsically related to oocyte quality Abstract of the 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, TX, October 11-15, 2003.
29. Bar-Chama N, Barritt J, Duke M, **Miller K**, Scott R, Copperman A. Post-processed semen specimens with deficits in strict morphology may not require intracytoplasmic sperm injection (ICSI) to achieve good reproductive outcomes. Abstract of the 59th Annual Meeting of the American Society for Reproductive Medicine, San Antonio, TX, October 11-15, 2003.
30. Lee A, **Miller K**, K.E. Elkind-Hirsch KE, Scott RT. The Un-Coast"- Use of Low-dose hCG Alone to Complete Ovarian Folliculogenesis in a High Responder. Abstract of the 60th Annual Meeting of the American Society for Reproductive Medicine, Philadelphia, PA, October 16-20, 2004.
31. **Miller K**, Elkind-Hirsch KE, Miller BT, Bergh PA, Drews MR, and Scott RT. Does Embryo Catheter Selection Impact Pregnancy Outcome: A Prospective Randomized Study? Abstract of the 2004 Annual Meeting and Educational Conference of the American Association of Bioanalysts, May 13-15, 2004.
32. **Miller KA**, Elkind-Hirsch, KE, Ross S, Levy B, Scott, RT. Human embryo cleavage rate does not predict gender as confirmed by day 3 blastomere biopsy and preimplantation genetic diagnosis. Abstract of the 52nd Annual Meeting of the Pacific Coast Reproductive Society, Pacific Coast, Rancho Mirage, CA, April, 2004
33. **Miller KA**, Elkind-Hirsch, KE, Bergh PA, Drews M, Scott, RT. Inter-batch variability of extended culture does not result in changes in embryo quality at the blastocyst stage. Abstract of the 52nd Annual Meeting of the Pacific Coast Reproductive Society, Pacific Coast, Rancho Mirage, CA, April, 2004.
34. Kassabian A, Bar-Chama N, Levy B, Ross S, **Miller K**, Scott R. Automated fluorescence *in situ* hybridization in human spermatozoa. Abstract of the 60th Annual Meeting of the American Society for Reproductive Medicine, Philadelphia, Pennsylvania, October 2004.
35. Lee A, Elkind-Hirsch KE, Bergh PA, Scott RT, **Miller KA**. "Un-Coasting" is Safe and Effective Method to Complete Ovarian Folliculogenesis in Very High Responders. Abstract of the 61th Annual Meeting of the American Society for Reproductive Medicine, Montreal, Canada, October 2005.
36. Grund EM, Martini PG, Palmer SS, **Miller K**, Scott Jr R, De Matos DG . Linear Amplification of RNA in the Picogram Range Present in a Single Human Blastomere for Microarray. Abstract of the 61th Annual Meeting of the American Society for Reproductive Medicine, Montreal, Canada, October 2005.
37. Denis D, Kagan D, De Matos DG, **Miller K**, Scott R, Palmer S. Whole Genome Amplification (WGA) and Short Tandem Repeat Analysis (STR) of Single Blastomeres for Embryo Fingerprinting and Embryo Genomics. Abstract of the 61th Annual Meeting of the American Society for Reproductive Medicine, Montreal, Canada, October 2005.
38. **Miller KA**, Elkind-Hirsch KE, Benson M, Levy B, Scott RT. Adjunctive PGD does not enhance embryo selection beyond any improvement provided by blastocyst embryo transfer. Abstract of the 62th Annual Meeting of the American Society for Reproductive Medicine, New Orleans, Louisiana, October 2006.
39. Scott R, Styne A, Shamonki M, **Miller K**. The predictive value of ovarian reserve screening with basal follicle stimulating hormone (FSH) levels is greatly impacted by the method used to select the threshold between normal and elevated basal FSH values. Abstract of the 62th Annual Meeting of the American Society for Reproductive Medicine, New Orleans, Louisiana, October 2006.
40. De Matos DG, **Miller K**, Scott R, Tran C, Kagan D, Palmer S. Leukemia inhibitory factor (LIF) induce cumulus expansion in immature human and mouse oocytes and improves mouse fertilization and delivery rates when it is present during mouse in vitro oocyte maturation (IVM). Abstract of the 62th Annual Meeting of the American Society for Reproductive Medicine, New Orleans, Louisiana, October 2006.
41. Treff NR, Tran CA, **Miller KA**, De Matos DG, Palmer SS, Scott RT. The human blastomere transcriptome and candidate noninvasive molecular prognostics of preimplantation embryo reproductive competence. Abstract of the 62th Annual Meeting of the American Society for Reproductive Medicine, New Orleans, Louisiana, October 2006.

42. Scott R, **Miller K**, Picnic S, Rosendahl S, Massey JB, Burns D. A prospective blinded evaluation of the relationship between metabolomic profiling of spent embryo culture media and human embryonic reproductive potential. Abstract of the 62th Annual Meeting of the American Society for Reproductive Medicine, New Orleans, Louisiana, October 2006.
43. Frattarelli JL, **Miller KA**, Nagy ZP, Taylor TH, Hoyt CC, Fletcher-Holmes DW, Scott RT. The use of quantitative birefringence imaging to assess oocyte competence. Submitted to Annual Meeting of the European Society of Human Reproduction and Embryology. Lyon France 2007.
44. **Miller KA**, Frattarelli JL, Elkind-Hirsch KE, Scott RT. The risk of monozygotic twinning in an in vitro fertilization cycle (IVF) may be intrinsically related to oocyte quality. Submitted to Annual Meeting of the European Society of Human Reproduction and Embryology. Lyon France 2007.
45. **Miller KA**, Cioppettini FV, Miller CP, Xu L, Fratarelli JL, Scott RT. Aneuploidy not gender impacts the developmental rate of IVF-derived human embryos as confirmed by day 3 blastomere biopsy and preimplantation genetic diagnosis. *Fertil Steril* September 2007 (Vol. 88, Page S308)
46. Frattarelli JL, **Miller KA**, Miller BT, Elkind-Hirsch KE, Scott RT. Male age negatively impacts embryo development and reproductive outcome in donor oocyte art cycles. *Fertil Steril* September 2007 (Vol. 88, Page S76)
47. **Miller KA**, Fratarelli JL, Bergh PA, Drews MR, Scott RT. The rate of embryonic progression is more important to implantation and pregnancy rates than the embryonic stage of transfer: a comparison of day 5 and day 6 blastocyst transfers. *Fertil Steril* September 2007 (Vol. 88, Page S327)
48. Scott RT, **Miller KA**, Frattarelli JL, Burns D. Metabolomic screening through long wave length near infrared biospectroscopy of spent embryo culture media predicts human embryonic reproductive potential – a prospective blinded study. *Fertil Steril* September 2007 (Vol. 88, Page S67).
49. Frattarelli JL, McWilliams GDE, Hill MJ, **Miller KA**, Scott RT. Low-dose aspirin use does not improve art outcomes in poor responders. *Fertil Steril* September 2007 (Vol. 88, Pages S126-S127)
50. Treff NR, Su J, Mavrianos J, Bergh PA, **Miller KA**, Scott RT. Accurate 23 chromosome aneuploidy screening in human blastomeres using single nucleotide polymorphism (SNP) microarrays. *Fertil Steril* September 2007 (Vol. 88, Page S1)
51. Shamonki MI, Glujovsky D, Wambach CM, **Miller KA**, Bergh PA. Formula predicting progression to blastocyst using characteristics from the first three days of development of 34,708 embryos. *Fertil Steril* September 2007 (Vol. 88, Pages S32-S33)
52. Frattarelli JL, Hill MJ, McWilliams GDE, **Miller KA**, Scott RT. A luteal estradiol stimulation protocol improves embryo number and quality for poor-responders undergoing ART. *Fertil Steril* September 2007 (Vol. 88, Page S289)
53. Wambach CM, Gueye A, Shamonki MI, Glujovsky D, **Miller KA**, Bergh PA. The number of blastomeres on day-2 and the progression to blastocyst: an analysis of 34,883 embryos. *Fertil Steril* September 2007 (Vol. 88, Pages S130-S131)
54. Wambach CM, Shamonki MI, Glujovsky D, **Miller KA**, Bergh PA. Day-3 embryo morphology and progression to blastocyst: an analysis of 34,708 embryos. *Fertil Steril* September 2007 (Vol. 88, Pages S125-S126)
55. Treff NR, Su J, Bergh EP, Levy B, **Miller KA**, Scott RT. Single-blastomere whole-genome DNA fingerprinting results in unequivocal embryo identification – a powerful new clinical and diagnostic tool. *Fertil Steril* September 2007 (Vol. 88, Pages S3-S4)
56. **Miller KA**, Li X, Lambrese K, Su J, Treff N, Scott RT. Blastocyst formation rates in chromosomally normal versus abnormal embryos as analyzed by 24 chromosome microarray-based aneuploidy screening (mPGD). *Fertil Steril* September 2008 (Vol. 90, Page S346)
57. Csokmay JM, Hill MJ, Cioppettini FV, **Miller KA**, Scott RT, Frattarelli JL. Live birth sex ratios are not influenced by blastocyst-stage embryo transfer. *Fertil Steril* September 2008 (Vol. 90, Page S400).
58. Frattarelli JL, Kushnir VA, **Miller KA**, Bergh PA, Drews MR, Scott RT. Media and air bubble flash pattern at time of ultrasound guided embryo transfer predicts pregnancy outcome: an analysis of 2266 consecutive embryo transfers. *Fertil Steril* September 2008 (Vol. 90, Page S241)
59. Su J, Tao X, Kasabwala ND, **Miller KA**, Scott RT, Treff NR. Robust embryo identification using first polar body (1st PB) single nucleotide polymorphism (SNP) microarray-based DNA Fingerprinting. *Fertil Steril* September 2008 (Vol. 90, Pages S82-S83)
60. Frattarelli JL, **Miller KA**, Morris J, Collins CA, Benson MR, Scott RT. The use of only recombinant-LH (recLH) to complete follicular maturation in oocyte donors results in improved outcomes: a prospective randomized cross-over study. *Fertil Steril*, September 2008 (Vol. 90, Page S76)
61. **Miller K**, Olivares, Craig C, Su J, Treff N, Scott RT. Poor progression of day 3 embryos to blastocyst stage of development may be related to a paternal origin of aneuploidy. A case report. *Fertil Steril* September 2008 (Vol. 90, Page S429)

62. Katz-Jaffe M, McCallie BR, Treff NR, **Miller KA**, Scott RT, Schoolcraft WB. A novel profile of cumulus cell transcripts is associated with oocyte aneuploidy. *Fertil Steril* September 2008 (Vol. 90, Page S36)
63. **Miller KA**, Northrop LE, Frattarelli JL, Su J, Treff NR, Scott RT. Reanalysis of day 3 fish PGD (fPGD) abnormal embryos which fully blastulated: 24 chromosome microarray PGD (mPGD) demonstrates a high rate of genetic normality and low rate of mosaicism. *Fertil Steril* September 2008 (Vol. 90, Page S48)
64. Scott RT, **Miller KA**, Olivares R, Su J, Fratterelli JL, Treff NR. Microarray based 24 chromosome preimplantation genetic diagnosis (mPGD) is highly predictive of the reproductive potential of human embryos: a prospective blinded non-selection trial. *Fertil Steril* September 2008 (Vol. 90, Pages S22-S23)
65. Treff NR, Su J, Tao X, Frattarelli JL, **Miller KA**, Scott RT. Characterization of the source of human embryonic aneuploidy using microarray-based 24 chromosome preimplantation genetic diagnosis (mPGD) and aneuploid chromosome fingerprinting. *Fertil Steril* September 2008 (Vol. 90, Page S37)
66. Scott RT, **Miller K**, Su J, Kamani M, Levy B, Treff N. Prospective, randomized, blinded and paired analysis of 24 chromosome microarray PGD (mPGD) vs 9 chromosome fish PGD (fPGD) in dispersed cleavage stage human embryos: mPGD has superior consistency. *Fertil Steril* September 2008 (Vol 90, Page S306)
67. Treff N, Tao X, Su J, Northrup L, Kamani M, Bergh P, **Miller K**, Levy B, Scott R. SNP Microarray Based Concurrent Screening of 24 chromosome Aneuploidy, Unbalanced Translocations and Single gene Disorders in Human Embryos: First Application of Comprehensive Triple Factor PGD. *Biol Reprod* July 2009; 81:188.
68. Levy B, Nahum O, Kamani M, **Miller K**, Su J, Treff N, Scott R. Preimplantation Microarray Analysis (PMA) is a robust technique that allows for the aneuploidy screening of all 24 chromosomes with a lower misdiagnosis rate than FISH based methodologies. Presented at the Annual Meeting of The American Society of Human Genetics, Nov 13, 2008, Philadelphia Pennsylvania.
69. Schultz P, Gueye NA, Azim A, **Miller K**, Treff N, Scott R. The Age Related Diminution in Implantation Rates is not Due Solely to an Increase in the Prevalence of Aneuploidy. O-23, ASRM 2009.
70. Treff N, Su J, Tao X, **Miller K**, Scott R. First IVF babies born after rapid 24 chromosome embryo aneuploidy screening and fresh embryo transfer. O-166, ASRM 2009.
71. Gueye NA, Schultz P, Amir A, **Miller K**, Treff N, Scott R. Day 3 FSH levels are not correlated with the prevalence of embryonic aneuploidy in embryos transferred to patients or cryopreserved following IVF. O-275, ASRM 2009.
72. Lonczak A, Tao X, **Miller K**, Scott R, Treff N. Dynamics of the human oocyte microRNA transcriptome during maturation. P-464, ASRM 2009.
73. **Miller KA**, Ferry K, Olivares R, Su J, Treff N, Scott R. Efficacy of Thaw, Trophectoderm Biopsy, Re-Cryopreservation and Pre-implantation Genetic Screening on Previously Frozen blastocyst Embryos. P-347, ASRM 2009.
74. *Treff N, Tao X, Su J, Taylor D, Miller K, Scott R.* Four Hour 24 chromosome aneuploidy screening using high throughput PCR SNP allele ratio analyses. O-169, ASRM 2009.

#### Papers

1. Gerson SL, **Miller K**, Berger NA. O<sup>6</sup> alkylguanine-DNA alkyltransferase activity in human myeloid cells. *Journal of Clinical Investigation* 76:2106-2114, 1985.
2. Gerson SL, Trey JE, **Miller K**, Berger NA. Comparison of O<sup>6</sup>-alkylguanine-DNA alkyltransferase activity based on cellular DNA content in human, rat and mouse tissue. *Carcinogenesis* 7:745-749, 1986.
3. Gerson SL, Trey JE, **Miller K**, Benjamin E. Repair of O<sup>6</sup>-alkylguanine during DNA synthesis in murine bone marrow hematopoietic precursors. *Cancer Research* 47:89-95, 1987.
4. Gerson SL, Trey JE, **Miller K**. Potentiation of nitrosourea cytotoxicity of human leukemic cells by inactivation of O<sup>6</sup>-alkylguanine-DNA alkyltransferase. *Cancer Research* 48:1521-1527, 1988
5. Pratt RC, **Miller K**, Paulis J. Zein fractions associated with maize endosperm hardness. *Cereal Chemistry* 72: 162-167, 1995.
6. Pittaway DE, Rondinone D, **Miller K**, Barnes K. Clinical Evaluation of CA125 Concentrations as a Prognostic Factor for Pregnancy in Infertile Women with Surgically Treated Endometriosis. *Fertil Steril* 64: 321-324, 1995.
7. **Miller K**, Pittaway DE, Deaton J. The effect of serum from women with endometriosis on fertilization and early embryonic development in a murine in vitro fertilization model. *Fertil Steril* 64: 623-626, 1995.

8. Deaton JL, Dempsey RA, **Miller KA**. Serum from women with polycystic ovary syndrome inhibits fertilization and embryonic development in the murine in vitro fertilization model. *Fertil Steril* 65: 1224-1228, 1996
9. Deaton JL, Bauguess P, Huffman CS, **Miller KA**. Pituitary response to early follicular phase mini dose gonadotropin releasing hormone agonist (GnRHa) therapy: evidence for a second flare. *Assisted Reproduction and Genetics* 13: 390-394, 1996.
10. **Miller KA**, Deaton JL, Pittaway DE. Evaluation of serum CA 125 concentrations as predictors of pregnancy with human in vitro fertilization. *Fertil Steril* 65: 1184-1189, 1996.
11. **Miller KA**, Patton GW, Queenan JT. The Performance of Sub-cutaneously Injected Fertinex When Utilized as The Sole Gonadotropin for In Vitro Fertilization Stimulation. *Fertil Steril* 69: 658-664, 1998.
12. Behr B, Fisch JD, Milki AA, Racowski C, **Miller K**, Pool TB. Blastocyst Transfer is Associated with an Increased Incidence of Monozygotic Twinning. *JARG* 2000.
13. **Miller KA**, Elkind-Hirsch KE, Benson MR, Bergh PA, Drews MR, Scott RT. A new follicle aspiration needle is equally effective and tolerated as the standard needle used for IVF. *Fertil Steril*, 81(1):191-193,2004.
14. **Miller KA**, Elkind-Hirsch, KE, Levy, B, Graubert, M, Ross, S, Scott, RT. Pregnancy after cryopreservation of donor oocytes and preimplantation genetic diagnosis of the embryos in a patient with ovarian failure. *Fertil Steril* 82: 211-214, 2004.
15. Scott RT, Elkind-Hirsch KE, Styne-Gross A, **Miller KA**, Frattarelli JL. The predictive value for in vitro fertility delivery rates is greatly impacted by the method used to select the threshold between normal and elevated basal follicle-stimulating hormone. *Fertil Steril* April 2008 (Vol. 89, Issue 4, Pages 868-878)
16. Frattarelli JL, Hill MJ, McWilliams GDE, **Miller KA**, Bergh PA, Scott RT. A luteal estradiol protocol for expected poor-responders improves embryo number and quality. *Fertil Steril* May 2008 (Vol. 89, Issue 5, Pages 1118-1122)
17. Frattarelli JL, McWilliams GDE, Hill MJ, **Miller KA**, Scott RT. Low-dose aspirin use does not improve in vitro fertilization outcomes in poor responders . *Fertil Steril* May 2008 (Vol. 89, Issue 5, Pages 1113-1117)
18. Frattarelli JL, **Miller KA**, Miller BT, Elkind-Hirsch KE, Scott RT . Male age negatively impacts embryo development and reproductive outcome in donor oocyte assisted reproductive technology cycles. *Fertil Steril* July 2008 (Vol. 90, Issue 1, Pages 97-103).
19. Scott R, Seli E, **Miller K**, Sakkas D, Scott K, Burns DH. Noninvasive metabolomic profiling of human embryo culture media using Raman spectroscopy predicts embryonic reproductive potential: a prospective blinded pilot study. *Fertil Steril* July 2008 (Vol. 90, Issue 1, Pages 77-83)
20. De Matos DG, **Miller K**, Scott R, Tran CA, Kagan D, Nataraja SG, Clark A, Palmer S. Leukemia inhibitory factor induces cumulus expansion in immature human and mouse oocytes and improves mouse two-cell rate and delivery rates when it is present during mouse in vitro oocyte maturation. *Fertil Steril* December 2008 (Vol. 90, Issue 6, Pages 2367-2375)
21. Hill MJ, McWilliams GDE, **Miller KA**, Scott RT, Frattarelli JL. A luteal estradiol protocol for anticipated poor-responder patients may improve delivery rates. *Fertil Steril* March 2009 (Vol. 91, Issue 3, Pages 739-743).
22. Csokmay JM, Hill MJ, Cioppettini FV, **Miller KA**, Scott RT. Live birth sex ratios are not influenced by blastocyst-stage embryo transfer. *Fertil Steril* DOI: 10.1016/j.fertnstert.2008.07.1741
23. Hill MJ, **Miller KA**, Frattarelli JL. A GnRH agonist and exogenous hormone stimulation protocol has a higher live-birth rate than a natural endogenous hormone protocol for frozen-thawed blastocyst-stage embryo transfer cycles: an analysis of 1391 cycles. *Fertil Steril* DOI: 10.1016/j.fertnstert.2008.11.027
24. Treff NR, Su J, Tao X, **Miller KA**, Levy B, Scott RT. A novel single-cell DNA fingerprinting method successfully distinguishes sibling human embryos. *Fertil Steril* DOI: 10.1016/j.fertnstert. 2009.03.067
25. Treff NR, Su J, Kasabwala N, **Miller KA**, Levy B, Scott RT. Robust embryo identification using first polar body single nucleotide polymorphism (SNP) microarray-based DNA fingerprinting. *Fertil Steril*. Under Review.

## **Chapters**

1. Deaton JL, Dempsey RA, Spencer T, **Miller KA**. Polycystic Ovarian Disease, Fertilization, and Early Embryonic Development. *In Polycystic Ovarian Disease*, J.Chang, editor, Serono Symposium, U.S. 1995.
2. **Miller KA**, Patton GW, Queenan JT. Embryo Transfer Catheters in a Human IVF Program. *In Assisted Reproduction Reviews*. 1999.
3. **Miller KA**. Male Infertility and ICSI. *In Up-To-Date Infertility Review*, 2003-2011.

4. **Miller KA.** Intracytoplasmic Sperm Injection (ICSI). *In Andrology & Embryology Review Course Manual*, American Association of Bioanalysis, 2003-2009.
5. **Miller KA.** Embryo Selection and Transfer. *In Andrology & Embryology Review Course Manual*, American Association of Bioanalysis, 2003-2009.
6. **Miller KA.** Quality Management of the Embryology Laboratory. *In Andrology & Embryology Review Course Manual*, American Association of Bioanalysis, 2003-2009.
7. **Miller KA.** Micromanipulation. *In Andrology & Embryology Review Course Manual*, American Association of Bioanalysis, 2006-2009.
8. **Miller KA.** PGD Fact Sheet. American Fertility Association Patient Information Directory. October 2010.
9. **Miller KA.** Single Blastocyst Transfer: The results are in the details. Sage IVF whitepaper. October 2010.
10. **Miller KA,** Hitkari J. and Yuzpe A. Single Embryo Transfer: Genesis Fertility Center. Video. January 2011.
11. **Smith GDS and Miller KA.** Fertility Preservation Fact Sheet. American Fertility Association Patient Information Directory. May 2011.

## PRESENTATIONS

1. "Laboratory to Life, The treatment of male factor infertility by assisted reproductive technologies (ART)". Faculty, Assisting the Stork: Help for the Infertile Patients Through Effective Nursing, Baptist Medical Center, Columbia South Carolina, March 1996.
2. "Time to Change, Is Blastocyst Transfer Right for Your IVF Program?" Invited Speaker, Northern New Jersey IVF Center, March 1999.
3. "Time to Change, Is Blastocyst Transfer Right for Your IVF Program?" Invited Speaker, Huntington Reproductive Center, Pasadena, California, March 1999.
4. "Time to Change, Is Blastocyst Transfer Right for Your IVF Program?" Invited Speaker, California Fertility Partners/Center for Assisted Reproductive Medicine, Santa Monica California, March 1999.
5. "Utilization of LH in stimulations- Impact Upon Embryo Quality". Invited speaker, Chicago RE dinner, Chicago, Illinois, April 1999.
6. "Time to Change, Is Blastocyst Transfer Right for Your IVF Program?" Invited Speaker, CARE, Chicago Illinois, April 1999.
7. "Implementing a Successful Blastocyst Transfer Program" Invited Speaker, Baltimore-Washington Reproductive Endocrinology Society, April 1999.
8. "Time to Change - Is Fresh Blastocyst Transfer Right For Your IVF Program?" Faculty, Advanced Techniques in Assisted Reproductive Technologies: Co-culture, Blastocyst Growth, Cryopreservation of Blastocyst, Augusta Georgia, April 1999.
9. "Blastocysts In Donor Oocyte Programs?" Faculty, Advanced Techniques in Assisted Reproductive Technologies: Co-culture, Blastocyst Growth, Cryopreservation of Blastocyst, Augusta Georgia, April 1999.
10. "Blastocyst Transfer in Donor Oocyte Cycles", Faculty, ART of Donor Oocytes, Charleston, South Carolina, May 1999.
11. "Blastocyst Culture". Faculty, Council for the Advancement of Ovulation Induction and Assisted Reproductive Technology, Programs in Medicine; Charleston, South Carolina May 1999.
12. "Time to Change - Is Fresh Blastocyst Transfer Right For Your IVF Program ?". Faculty, American Association of Bioanalyst National Meeting, College of Reproductive Biology, San Diego California, June 1999.
13. "Time to Change, Is Blastocyst Transfer Right for Your IVF Program?". Invited Speaker, Saint Louis Embryology Society, St. Louis, Missouri, June 1999.
14. "Implementing a Successful Blastocyst Transfer Program" Invited Speaker, Kansas City Embryology Society, Kansas City, June 1999.
15. "Understanding the ART laboratory", Invited Speaker, Sage Biopharma National Sales Meeting, August 1999.
16. "Embryology 2000". Faculty, American Association of Medical Assistants, National Convention, Nashville Tennessee, October 1999.
17. Speaker, Workshop & Seminar: Cryopreservation of Embryos, American Society of Reproductive Medicine, San Diego California 2000.
18. "Understanding the ART laboratory", Invited Speaker, Ferring Pharmaceuticals National Sales Meeting, January 2000.
19. Faculty, American Association of Bioanalysis, College of Reproductive Biology, Andrology & Embryology Review Course, Rush University Hospital, Chicago, Illinois, March 2000.

20. "Can Frozen Embryos have the same pregnancy potential as fresh embryos". Invited Speaker, Boston IVF, January 2001.
21. "Blastocyst Transfer and Cryopreservation: The New Jersey Experience". Invited Speaker, Miami RE Society, February 2001.
22. "Embryo Grading Systems". Roundtable Speaker, American Society for Reproductive Medicine, Annual Meeting, Orlando, Florida 2001.
23. "Fragmentation and Embryo Competence". Invited Speaker, Chicago Embryology Society. Chicago Illinois February 2002.
24. "Day of Embryo Transfer, Impact on Multiple Pregnancy Rates". Invited Speaker, Akron-Cleveland Reproductive Endocrinology Society, Akron Ohio May 2002.
25. "Embryology 2002". Invited Speaker, Organon scientific liaison training dinner, 2002.
26. Speaker, American Infertility Association National Meeting, New York City, April 2002.
27. "Micromanipulation". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Chicago, Illinois, April 2003.
28. "Embryo Selection and Transfer". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Chicago, Illinois, April 2003.
29. "Quality Management of the Embryology Laboratory". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Chicago, Illinois, April 2003.
30. "Optimization of the ART laboratory". Post Graduate Faculty, Pacific Coast Reproductive Society Annual Meeting, Rancho Mirage, California. April 2003.
31. "One Embryo Transfer and Blastocysts as Options for Controlling Multiples". Speaker, American Infertility Association National Meeting, New York City, April 2003.
32. Chair, "Incorporating PGD Into Your Clinical Practice", Annual Clinical Meeting of the American Society of Reproductive Medicine, San Antonio Texas, October 13, 2003
33. "Micromanipulation". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Dallas, Texas, 2004.
34. "Embryo Selection and Transfer". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Dallas, Texas, 2004.
35. "Quality Management of the Embryology Laboratory". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Dallas, Texas, 2004.
36. "Selecting Embryos by Morphology" Faculty, American Association of Bioanalyst National Meeting, College of Reproductive Biology, Las Vegas, Nevada, May 2004.
37. "The New Gadetry in the IVF Lab" Annual Clinical Meeting of the American Society of Reproductive Medicine, Philadelphia, Pennsylvania, October 2004
38. "Coordination of Embryo Biopsy with Off-Site PGD Lab" Annual Clinical Meeting of the American Society of Reproductive Medicine, Philadelphia, Pennsylvania, October 2004.
39. "Hands on PGD Workshop" Course Chair, American Association of Bioanalyst, Morristown NJ, October 2004.
40. The Use Of PGD In Oocyte and Embryo Cryobiology. Faculty, Post Graduate Course, American Association of Bioanalysis, Dania, Florida, December 2004.
41. "Hands on PGD Workshop" Course Chair, American Association of Bioanalysis, Morristown NJ, January 2005.
42. The Use Of PGD In Oocyte and Embryo Cryobiology. Faculty, Post Graduate Course, American Association of Bioanalysis, Irvine, California, January 2005.
43. "ART Now! A Step by Step Guide to High Technology". Speaker, American Fertility Association National Meeting, New York City, April 2005.
44. "Is There More To Male Reproductive Competence Than Fertilization" Advancing the Art of Human Reproduction: Physiology and Technology, Serono Symposium, Miami, Florida, May 12-15, 2005
45. "Hands on PGD Workshop" Course Chair, Advancing the Art of Human Reproduction: Physiology and Technology, Serono Symposium, Miami, Florida, May 12-15, 2005.

46. "Technical Do's and Don'ts of PGD" Annual Clinical Meeting of the American Society of Reproductive Medicine, Montreal Canada October 2005.
47. "Micromanipulation". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Dallas, Texas, March 2006.
48. "Embryo Selection and Transfer". Faculty, Andrology & Embryology Review Course, American Association of Bioanalysis, Dallas, Texas, March 2006.
49. "Updated Embryo Biopsy and Fixation Techniques", Invited Speaker, American Association of Bioanalyst National Meeting, College of Reproductive Biology, Las Vegas, NV May 2006.
50. "New Pre-Implantation Genetic Diagnosis (PGD) Technologies" Faculty, Postgraduate Course of RLTPG, Annual Clinical Meeting of the American Society of Reproductive Medicine, New Orleans, Louisiana, October 2006.
51. "Updated Embryo Biopsy and Fixation Techniques", Faculty, Postgraduate Course of RLTPG, Annual Clinical Meeting of the American Society of Reproductive Medicine, New Orleans, Louisiana, October 2006.
52. The "OMICS": Are these tests the key to optimizing oocyte and embryo competence and the key to optimizing embryo selection? Invited Speaker, Florida Society of Reproductive Endocrinology and Infertility. Orlando Florida April 21, 2007.
53. Moving towards a Single Embryo Transfer: An Embryologists Perspective. Invited Speaker, Florida Society of Reproductive Endocrinology and Infertility. Orlando Florida April 2007.
54. "Preimplantation Genetic Diagnosis" Current and Future Techniques and Technology- How do we define accuracy? Invited Speaker, New England Fertility Society. Mystic, Connecticut. May 2007.
55. "Updated Embryo Biopsy and Fixation Techniques- Hands on Workshop ", Chair and Faculty, American Association of Bioanalyst National Meeting, College of Reproductive Biology, Orlando, Florida May 2007.
56. Embryo Morphology: Is What You See, What You Get? Annual Meeting of The College of Reproductive Biology, American Association of Bioanalysis, Orlando, Florida May 2007.
57. Adoption of a Uniform Embryo Morphology Classification System for Prediction of Pregnancy Outcome - Can a Single Observation Reveal True Zygote Morphology? Speaker, Plenary Session of RLTPG and RBPG, Annual Meeting of the American Society of Reproductive Medicine, Washington, DC, October 2007.
58. Early Embryos and Blastocysts -Optimization of culture, quality criteria and selection for transfer. Cleavage embryos or Blastocysts? Invited Speaker, European Society of Human Reproduction and Embryology. Barcelona Spain June 2008.
59. PGD Technologies- Past, Present and Future. Speaker, Plenary Session of Nurses Professional Group, Annual Clinical Meeting of the American Society of Reproductive Medicine, San Francisco, California, October 2008.
60. Embryo Diagnostics. Invited Speaker, New York Embryology Society. New York, New York. June 8, 2009.
61. Single Blastocyst Transfer - The tricks are in the details. Invited Speaker, Sage IVF. European Society of Human Reproduction and Embryology Rome, Italy. July 2010.
62. Are pH and temperature important- Tips to improve your culture system to perform single embryo transfer? Invited Speaker, Canadian Fertility Society. Vancouver, British Columbia, Canada. September 2010.
63. Advanced Maternal Age Treatment Options. Invited Speaker, Canadian Fertility Society. Vancouver, British Columbia, Canada. September 2010.
64. Factors that Enhance Embryo Culture- On the road to single embryo? Invited Speaker, Sage IVF. American Society of Reproductive Medicine. October 2010.
65. "Hands on PGD Workshop" Course Chair, American Society of Reproductive Medicine. Denver, Colorado. October 2010.
66. Single Blastocyst Transfer - Maintaining pregnancy rates while minimizing multiple pregnancies. Invited Speaker, Sage IVF. Huntington Reproductive Center. March 2011.
67. Single Blastocyst Transfer - Maintaining pregnancy rates while minimizing multiple pregnancies. Invited Speaker, Smith Medical Wallace Catheter. Pacific Coast Reproductive Society. April 2011.
68. "Embryo Biopsy and Vitrification Techniques- Hands on Workshop ", Program Chair, Faculty and Speaker, American Association of Bioanalyst National Meeting, College of Reproductive Biology, Austin, Texas, May 2011.

69. "The Assessment and selection of embryos to optimize eSET pregnancy outcome", Invited Speaker, Toronto Embryology Society, June 2011.
70. "Prerequisites for a successful eSET program – the laboratory component". Invited Speaker, Canadian Fertility Society. Toronto, British Columbia, Canada. September 2011.

#### **CONSULTATIONS AND ADVISORY BOARDS**

1. Technical Consultant, College of American Pathologists, Reproductive Laboratory Accreditation Program, 1995.
3. Technical Consultant, Tissue Culture Division, Sarstedt, Inc., 1995.
4. Speakers Bureau, Ferring Pharmaceuticals, 1997-2001
5. Technical Consultant, ARTechnologies, San Diego California, 1998.
6. Technical Consultant, CCD Frydman, France, 1998.
7. Consultant, Doctors + Designers, Westfield NJ, 1999.
8. Technical Consultant, Sage Biopharma, 199-2002.
9. Technical Consultant, Conception Technologies 2001-2002.
10. Technical Consultant, Z 3 Design 2001-2002.
11. Laboratory Inspector, College of American Pathologists, 2001-Present.
12. Serono Embryology Advisory Board 2004-2007.
13. Scientific Advisor, Parent Plus, 2009.
14. Advisor, College of American Pathologists, PGD and Molecular Genetics checklist revisions, 2009.
15. Technical Consultant, Gene Security Network, 2010.
16. Technical Consultant, Sage IVF/Cooper Surgical, 2010.
17. Technical Consultant, Smith Medical Wallace Catheter, 2010.

#### **COMMITTEES AND OFFICES**

1. Abstract Review Committee, American Society for Reproductive Medicine, Section of Laboratory Technology, 1997.
2. Program Chair and Organizer, ART of Donor Oocytes, Charleston, South Carolina, May 1999.
3. Chair, Membership Committee, Reproductive Biology Professional Group, American Society for Reproductive Medicine 2000.
4. Abstract Review Committee, American Society for Reproductive Medicine, Section of Laboratory Technology 2000.
5. Member, Ad Hoc Continuing Education Committee, American Society for Reproductive Medicine/RBPG 2002.
6. Abstract Review Committee, American Society for Reproductive Medicine, Reproductive Biology Professional Group 2002.
7. Planning Committee, Post Graduate Course, Reproductive Biology Professional Group, American Society for Reproductive Medicine, Annual Meeting, Seattle Washington 2002.
8. Chair, "Incorporating PGD Into Your Clinical Practice", Annual Clinical Meeting of the American Society of Reproductive Medicine, San Antonio Texas, October 13, 2003
9. Northeast Regional Board Member, College of Reproductive Biology, American Association of Bioanalysis, 2005
10. Abstract Review Committee, American Society for Reproductive Medicine, Reproductive Biology Professional Group, 2006.
11. President, College of Reproductive Biology, American Association of Bioanalysis, 2006-2007

12. Program Chair, Annual Meeting of The College of Reproductive Biology, American Association of Bioanalysis, Orlando, Florida May 2007.
13. Abstract Review Committee, American Society for Reproductive Medicine, Reproductive Biology Professional Group, 2009.

**HONORS AND AWARDS**

1. Distinguished Alumni Award, Revere High School, Akron Ohio, May 2003.
2. Family Building Award, American Fertility Association, 2005.
3. **Prize Paper Of The Annual Meeting of the American Society of Reproductive Medicine**, Washington, DC, October 2007. Accurate 23 chromosome aneuploidy screening in human blastomeres using single nucleotide polymorphism (SNP) microarrays. Treff NR, Su J, Mavrianos J, Bergh PA, **Miller KA**, Scott RT.

**PROFESSIONAL SOCIETIES**

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|------|--|
| 2007 | European Society of Human Reproduction and Embryology          |
| 2004 | Pacific Coast Fertility Society                                |
| 1998 | International Embryo Transfer Society                          |
| 1998 | Alpha Embryological Society                                    |
| 1997 | College of Reproductive Biology, American Board of Bioanalysts |
| 1994 | American Association of Bioanalysis                            |
| 1993 | American Fertility Society                                     |
| 1993 | Society for the Study of Reproduction                          |
| 1993 | American Society of Andrology                                  |