

## Dr. Katz-Jaffe Peer-Reviewed Publications

Katz MG & Vollenhoven B. (2000) The endocrine reproductive consequences of anorexia nervosa. *British Journal of Obstetrics and Gynaecology* 107: 707-713.

Katz MG, Trounson AO and Cram DS. (2002) DNA fingerprinting of sister blastomeres from human IVF embryos. *Human Reproduction* 17: 752-759.

Katz MG, Chu B, Alexopoulos N, McLachlan R, de Kretser DM and Cram DS. (2002) Genetic follow up of male offspring born by ICSI using a multiplex fluorescent PCR based test for Yq deletions. *Molecular Human Reproduction* 8: 589-595.

Katz MG, Mansfield J, Gras L, Trounson AO and Cram DS. (2002) Diagnosis of trisomy 21 in preimplantation embryos by single cell DNA fingerprinting. *Reproductive BioMedicine Online* 4: 43-50.

Katz MG, Fitzgerald L, Bankier A, Savulescu J and Cram DS. (2002) Issues and concerns of couples presenting for preimplantation genetic diagnosis (PGD). *Prenatal Diagnosis* 22: 1117-1122.

Katz-Jaffe MG, Trounson AO and Cram DS. (2004) Mitotic errors in chromosome 21 of human pre-implantation embryos are associated with non-viability. *Molecular Human Reproduction* 10: 143-147.

Katz-Jaffe MG, Mantzaris D and Cram DS. (2005) DNA identification of fetal cells isolated from cervical mucus: potential for early non-invasive prenatal diagnosis. *British Journal of Obstetrics and Gynaecology*. 112: 595-600.

Katz-Jaffe MG, Trounson AO and Cram DS. (2005) Chromosome 21 mosaic human preimplantation embryos predominantly arise from diploid conceptions. *Fertil Steril*. 84: 634-43

Katz-Jaffe MG, Linck DW, Schoolcraft WB and Gardner DK. (2005) A proteomic analysis of mammalian preimplantation embryonic development. *Reproduction* 130: 899-905.

Katz-Jaffe MG, Gardner DK and Schoolcraft WB. (2006) Proteomic analysis of individual human embryos to identify novel biomarkers of development and viability. *Fertil Steril*, 85(1): 101-107.

Katz-Jaffe MG, Schoolcraft WB and Gardner DK. (2006) Analysis of Protein Expression (Secretome) by Human and Mouse Preimplantation Embryos. *Fertil Steril*, 86(3): 678-685.

Larman MG, Katz-Jaffe MG, Sheehan CB, Gardner DK. (2007) 1,2-propanediol and the type of cryopreservation procedure adversely affect mouse oocyte physiology. *Human Reproduction*, 22(1):250-259.

Gardner DK, Sheehan CB, Rienzi L, Katz-Jaffe M, Larman MG. (2007) Analysis of Oocyte Physiology to Improve Cryopreservation Procedures. *Theriogenology*, 67(1):64-72.

Katz-Jaffe MG, Gardner DK. Embryology in the era of proteomics. (2007) *Theriogenology* 68S: S125-S130.

Katz-Jaffe MG, Larman MG, Sheehan CB, Gardner DK. (2008) Exposure of mouse oocytes to 1,2-propanediol during slow freezing alters the proteome. *Fertil Steril* 89(5 Suppl):1441-1447.

Schoolcraft WB, Katz-Jaffe MG, Stevens J, Rawlins M, Munne S. (2009) Preimplantation aneuploidy testing for infertile patients of advanced maternal age: a randomized prospective trial. *Fertil Steril* 92(1):157-62.

Fragouli E, Lenzi M, Ross R, Katz-Jaffe M, Schoolcraft WB, Wells D. (2008) Comprehensive molecular cytogenetic analysis of the human blastocyst stage. *Human Reproduction* 23(11): 2596-608.

Katz-Jaffe MG and Gardner DK. (2008) Can proteomics help shape the future of human assisted conception? *Reproductive BioMedicine Online*, 17(4):497-501.

Katz-Jaffe MG, McCallie BR, Preis KA, Filipovits J, Gardner DK. (2009) Transcriptome analysis of in vivo and in vitro matured bovine MII oocytes. *Theriogenology*, 71(6):939-46.

McCallie BR, Schoolcraft WB, Katz-Jaffe MG (2009) Aberration of blastocyst microRNA expression is associated with human infertility. *Fertil Steril*, 93(7):2374-82.

Katz-Jaffe MG, Reynolds S, Gardner DK, Schoolcraft WB. (2009) The role of proteomics in defining the human embryonic secretome. *Mol Hum Reprod*, 15(5):271-7.

Fragouli E, Katz-Jaffe M, Alfarawati S, Stevens J, Colls P, Goodall NN, Tormasi S, Guitierrez-Mateo C, Prates R, Schoolcraft WB, Munne S, Wells D. (2009) Comprehensive chromosome screening of polar bodies and blastocyst from couples experiencing repeated implantation failure. *Fertil Steril*, 94(3):875-887.

Munne S, Fragouli E, Colls P, Katz-Jaffe MG, Schoolcraft WB, Wells D. (2010) Improved detection of aneuploid blastocysts using a new 12-chromosome FISH test. *Reprod Biomed Online*. 20(1):92-97.

Schoolcraft WB, Fragouli E, Stevens J, Munne S, Katz-Jaffe MG, Wells D. (2009) Clinical application of comprehensive chromosomal screening at the blastocyst stage. *Fertil Steril*, 94(5):1700-1706.

M.G. Katz-Jaffe, B.R. McCallie, A. Janesch, J.A. Filipovits, W.B. Schoolcraft, D.K. Gardner. (2010) Blastocysts from patients with polycystic ovaries exhibit altered transcriptome and secretome. *RBM Online* 12(4):520-526

Alfarawati S, Fragouli E, Colls P, Stevens J, Gutierrez-Mateo C, Schoolcraft WB, Katz-Jaffe MG, Wells D. (2011) The relationship between blastocyst morphology, chromosomal abnormality and embryo gender. *Fertil Steril*, 95(2):520-524

Parks J, McCallie B, Janesch A, Schoolcraft WB, Katz-Jaffe MG (2011) Blastocyst gene expression correlates with implantation potential. *Fertil Steril*, 95(4):1367-72.

McReynolds S, Vanderlinden L, Stevens J, Hansen K, Schoolcraft WB, Katz-Jaffe MG (2011) Lipocalin-1 a potential marker for non-invasive aneuploidy screening. *Fertil Steril*, 95(8):2631-3.

MG Katz-Jaffe, MG Larman, BR McCallie, J Filipovits, Gardner DK (2011) Analysis of global gene expression following mouse blastocyst cryopreservation. *Hum Reprod.* 26(10):2672-2680.

Schoolcraft WB, Treff N, Stevens J, Ferry K, Katz-Jaffe MG, Scott RT. (2011) Live birth outcome with trophectoderm biopsy, blastocyst vitrification and single nucleotide polymorphism microarray based comprehensive chromosome screening in infertile patients. *Fertil Steril*, 96(3):638-640.

Treff N, Scott RT, Su J, Campos J, Stevens J, Schoolcraft, WB, Katz-Jaffe M. (2012) Polar body morphology is not predictive of its cell division origin. *JARG*, 29(2):137-9.

Scott RT, Treff NR, Stevens J, Forman EJ, Hong KH, Katz-Jaffe MG, Schoolcraft WB. (2012) Delivery of a chromosomally normal child from an oocyte with reciprocal aneuploid polar bodies. JARG, 29(6):533-7.

McReynolds S, Dzieciatkowska M, McCallie B, Mitchell S, Stevens J, Hansen K, Schoolcraft WB, Katz-Jaffe MG. (2012) Impact of maternal aging on the molecular signature of human cumulus cells. *Fertil Steril* 98(6):1574-1580.

Katz-Jaffe MG, Surrey ES, Minjarez D, Gustofson R, Stevens J and Schoolcraft WB. (2013) Association of abnormal ovarian reserve parameters with a higher incidence of aneuploid blastocysts. *Obstetrics and Gynecology* 121(1):71-7.

E.J. Forman, N.R. Treff, J.M. Stevens, H.M. Garnsey, M.G. Katz-Jaffe, R.T. Scott, Jr., W.B. Schoolcraft. (2013) Embryos whose polar bodies contained isolated reciprocal chromosome aneuploidy are almost always euploid. *Hum Reprod* 28(2):502-8.

Katz-Jaffe, MG and McReynolds S. (2013) Embryology in the era of proteomics. *Fertil Steril.* 99(4):1073-7.

Katz-Jaffe, MG, Parks J, McCallie B and Schoolcraft WB. (2013) Aging sperm negatively impacts in vivo and in vitro reproduction: a longitudinal murine study. *Fertil Steril.* 100(1):262-268.

Gardner DK, Hamilton R, McCallie B, Schoolcraft WB and Katz-Jaffe MG (2013) Human and mouse embryonic development, metabolism and gene expression are impaired by an ammonium gradient in vitro. *Reproduction* 146(1):49-61.

Treff N, Forman EJ, Katz-Jaffe MG, Schoolcraft WB, Levy B and Scott RT Jr. (2013) Incidental Identification of Balanced Translocation Carrier Patients through Comprehensive Chromosome Screening of IVF-derived Blastocysts. *JARG* 30(6):787-91.

Schoolcraft WB and Katz-Jaffe MG. (2013) Comprehensive chromosome screening of trophectoderm with vitrification facilitates elective single-embryo transfer for infertile women with advanced maternal age. *Fertil Steril.* 100(3):615-9.

Roth LW, McCallie B, Alvero R, Schoolcraft WB, Minjarez D and Katz-Jaffe MG (2014) Altered microRNA and Gene Expression in the Follicular Fluid of Women with Polycystic Ovary Syndrome. *JARG* 31(3):355-362.

McCallie B, Parks J, Strieby A, Schoolcraft WB and Katz-Jaffe MG (2014) Human blastocysts exhibit unique microRNA profiles in relation to maternal age and chromosome constitution. *JARG* 31(7):913-9.

McReynolds S, Dzieciatkowska M, Stevens J, Hansen K, Schoolcraft WB and Katz-Jaffe MG (2014) Towards the identification of a subset of unexplained infertility: a sperm proteome approach. *Fertil Steril* 102(3):692-9.

Dumesic DA, Meldrum DR, Katz-Jaffe MG, Krisher RL and Schoolcraft WB (2015) The oocyte environment: follicular fluid and cumulus cells are critical for oocyte health. *Fertil Steril* 103(2):303-16.

Krisher RL, Schoolcraft WB and Katz-Jaffe MG (2015) Omics as a window to view embryo viability. *Fertil Steril* 103(2):333-41.

Parks JC, Patton AL, McCallie BR, Griffin DK, Schoolcraft WB and Katz-Jaffe MG (2016) Corona Cell RNA Sequencing from Individual Oocytes Revealed Transcripts and Pathways Linked to Euploid Oocyte Competence and Live Birth. *RBM Online* 32(5):518-26.

Meldrum DR, Su HI, Katz-Jaffe MG, Schoolcraft WB. (2016) Preimplantation genetic screening 2.0: an evolving and promising technique. *Fertil Steril* 106(1):64-65.

Denomme MM, McCallie BR, Parks JC, Schoolcraft WB and Katz-Jaffe MG (2016) Epigenetic dysregulation observed in monosomy blastocysts may contribute to their negligible implantation potential. PLOS One 11(6) e0156980.

McCallie BR, Parks JC, Patton AL, Griffin DK, Schoolcraft WB and Katz-Jaffe MG (2016) Hypomethylation and genetic instability in monosomy blastocysts may contribute to decreased implantation potential. PLOS One 11(7) e0159507.

McCallie BR, Parks JC, Griffin DK, Schoolcraft WB and Katz-Jaffe MG (2017) Infertility diagnosis has a significant impact on the transcriptome of developing blastocysts. *Mol Hum Reprod* 23(8).

Surrey ES, Katz-Jaffe MG, Kondapalli LV, Gustofson RL and Schoolcraft WB. (2017) GnRH agonist administration prior to embryo transfer in freeze-all cycles of patients with endometriosis or aberrant endometrial integrin expression. *Reprod Biomed Online* 35(2).

Denomme MM, McCallie BR, Parks JC, Schoolcraft WB and Katz-Jaffe MG (2017) Alterations in the sperm histone-retained epigenome are associated with unexplained male factor infertility and poor blastocyst development in donor oocyte IVF cycles. *Human Reprod 32*(12).

Surrey ES, Katz-Jaffe M, Surrey RL, Small AS, Gustofson RL, Schoolcraft WB. (2018) Arcuate uterus: is there an impact on in vitro fertilization outcomes after euploid embryo transfer? *Fertil Steril*. 109(4):638-643.

Parks JC, McCallie BR, Patton AL, Al-Safi ZA, Polotsky A, Griffin D, Schoolcraft WB, Katz-Jaffe MG (2018) The Impact of Infertility Diagnosis on Embryo-Endometrial Dialogue. *Reproduction*.155(6): 543-552. Denomme MM, McCallie BR, Parks JC, Booher K, Schoolcraft WB and Katz-Jaffe MG (2018). Inheritance of epigenetic dysregulation from compromised spermatogenesis has a direct impact on reproductive potential. *Fertil Steril*. 110(3): 419-428.

Young D, Klepacka D, McGarvey M, Schoolcraft WB, Mandy Katz-Jaffe (2019). Infertility patients with chromosome inversions are not susceptible to an interchromosomal effect. *JARG*. 36(3): 509-516.

McCallie BR, Parks JC, Trahan GD, Jones KL, Coate BD, Griffin DK, Schoolcraft WB, Katz-Jaffe MG. (2019). Compromised global embryonic transcriptome associated with advanced maternal age. *JARG.* In Press.

## **Book Chapters**

Katz-Jaffe MG (2006) Preimplantation Genetic Diagnosis. In: In Vitro Fertilization: A Practical Approach. Ed: Gardner DK. CRC Press

Katz-Jaffe MG (2009) Proteomic analysis of the embryo. In: Textbook of Assisted Reproductive Technologies Third Edition. Eds: Gardner DK, Weissman A, Howles CM, Shoham Z. Informa UK Ltd

Katz-Jaffe MG & McReynolds S (2010) Proteomic/Metabolomic Analysis of Embryos – Current Status for Use in ART. In: Vol 2 of the Biennial Reviews of Infertility. Eds Racowsky C, Schlegel P, Fauser B, Carrell D. Springer.

Katz-Jaffe MG (2011) Proteomic analysis of the embryo. In: Textbook of Assisted Reproductive Technologies Fourth Edition. Eds: Gardner DK, Weissman A, Howles CM, Shoham Z. Informa UK Ltd

Katz-Jaffe MG & McReynolds S (2012) Proteomic analysis of embryo viability. In: Human Gametes and Preimplantation Embryos: Assessment and Diagnosis. Eds: Gardner DK, Sakkas D, Seli E, Wells D. Springer.

Katz-Jaffe MG (2014) Diagnostic techniques to impove the assessment of human IVF embryos: Genomics and Proteomics. Ed: Sakkas D, Katz-Jaffe MG, Sueldo C. Springer.

Katz-Jaffe MG (2017) Proteomic analysis of the embryo. In: Textbook of Assisted Reproductive Technologies Fifth Edition. Eds: Gardner DK, Weissman A, Howles CM, Shoham Z. Informa UK Ltd

## Peer Reviewed & Presented International Conference Abstracts

Katz MG, Cram DS, Trounson AO. 'Development of single cell DNA fingerprinting for application in ART' Australian Society of Reproductive Biology, April 2000.

Katz MG, Cram DS, Trounson AO. 'Evaluation of DNA fingerprinting as a diagnostic tool for PGD' 11<sup>th</sup> Annual Meeting of International Workshop on PGD, May 2001.

Katz MG, Cram DS, Trounson AO. 'Diagnosis of trisomy 21 in pre-implantation embryos by single cell DNA fingerprinting' 17<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2001.

Katz MG, Fitzgerald L, Bankier A, Cram DS. 'Attitudes of couples presenting for assisted reproductive technology (ART) towards pre-implantation genetic diagnosis (PGD)' 17<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2001.

Katz MG, Fitzgerald L, Bankier A, Cram DS. 'Attitudes of potential couples towards preimplantation genetic diagnosis (PGD)' Human Genetics Society of Australasia, July 2001.

Katz MG, Trounson AO, Cram DS. 'FL-PCR for mutation & aneuploidy diagnosis in single cells' 17th World congress on Fertility and Sterility, November 2001.

Cram D, Katz MG, Chu B, Richardson S, Phan S, Gabbe M, Audrins P, DeKretser D, McLachlan R. 'Diagnosis of Yq microdeletions' 17th World congress on Fertility and Sterility, November 2001.

Katz MG, Lacham-Kaplan O, Denham MS, Cram DS, Trounson AO. 'The development of a single cell DNA fingerprinting system to evaluate the origin and nature of superovulation effects in mouse embryos' Lorne Genomics Conference, February 2002.

Katz MG, Trounson AO, Cram DS. 'Applications of DNA fingerprinting in pre-implantation diagnosis' 4<sup>th</sup> International Symposium on Pre-implantation Genetics, April 2002.

Katz MG, Trounson AO, Cram DS. 'Towards a better understanding of chromosomal mosaicism in human pre-implantation embryos' Annual Meeting of the American Society of Reproductive Medicine, October 2002.

Katz MG, Osborne E, Salvado C, Trounson AO, Cram D. 'Meiotic and mitotic division errors in pre-implantation embryos' 5<sup>th</sup> Symposium on Preimplantation Genetics, June 2003.

Gardner DK, Linck DL, Katz-Jaffe MG. 'Oxygen affects gene expression of mouse blastocysts' Annual Meeting Society for Reproduction and Fertility, April 2005

Katz-Jaffe MG, Linck DW, Schoolcraft WB, Gardner DK. 'Genetic background affects gene expression profiles of mouse blastocysts' 6<sup>th</sup> International Symposium on Preimplantation Genetics, May 2005

Wale P, Lunt B, Callaghan, T, Stevens J, Gardner DK, Schoolcraft WB, Katz-Jaffe MG. 'Preimplantation genetic screening success is dependent on the true representation of the

biopsied material to the embryos' chromosomal complement' 6<sup>th</sup> International Symposium on Preimplantation Genetics, May 2005

Cram DS, Mantzaris D, Katz-Jaffe MG. Retrieval of fetal cells from cervical mucus: potential for early genetic diagnosis? 13<sup>th</sup> World Congress on In vitro Fertilization Assisted Reproduction & Genetics, May 2005

Katz-Jaffe MG, Linck DW, Blakesley JR, Schoolcraft WB, Gardner DK. 'A Proteomic Analysis of Embryonic Development' 21<sup>st</sup> Annual meeting of the European Society of Human Reproduction and Embryology, June 2005

Gardner DK, Katz-Jaffe MG. 'Development and assessment of the human embryo' 38<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2005

Katz-Jaffe MG, Linck DW, Blakesley JR, Schoolcraft WB, Gardner DK High protein diet affects the proteomic profile of in-vivo developed mouse blastocysts' 38<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2005

Katz-Jaffe MG, Gardner DK, Schoolcraft WB. 'A novel non-invasive means of identifying the protein production profile into the culture medium (secretome) of the human preimplantation embryo' 61<sup>st</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2005

Gardner DK, Linck DW, Schoolcraft WB, Katz-Jaffe MG. 'Ammonium alters the proteome of cultured mouse blastocysts' 61<sup>st</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2005

Gardner DK, Linck DW, Schoolcraft WB, Katz-Jaffe MG. 'Analysis of the proteome and secretome of the preimplantation mouse embryo cultured with either recombinant human albumin or human serum albumin' 61<sup>st</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2005

Katz-Jaffe MG, Gardner DK, Schoolcraft WB. 'Proteomic analysis of individual human blastocysts' 61<sup>st</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2005

Katz-Jaffe MG, Sheehan CB, Schoolcraft WB, Gardner DK. 'Slow freezing alters the proteome of mouse oocytes' 61<sup>St</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2005

Katz-Jaffe MG, Sheehan CB, Schoolcraft WB, Gardner DK. 'Protein expression profile (secretome) of individual cumulus oocyte complexes during IVM in the mouse is affected by FSH' Annual Conference of the International Embryo Transfer Society, January 2006

Sheehan CB, Katz-Jaffe MG, Schoolcraft WB, Gardner DK. 'Exogenous gonadotropins alter the proteome of metaphase II mouse oocytes' 62<sup>nd</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2006

Katz-Jaffe MG, Stevens J, Kearns W, Gardner DK, Schoolcraft WB 'Relationship between embryonic secretome and chromosomal abnormalities in human IVF' 62<sup>nd</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2006

Larman MG, Katz-Jaffe MG, Sheehan CB, Schoolcraft WB, Gardner DK. 'Cryoprotectant exposure affects the proteome of the mouse metaphase II oocyte' Annual Conference of the International Embryo Transfer Society, January 2007

Katz-Jaffe MG, McCallie B, Preis K, Seidel G, Gardner DK. 'In vitro maturation (IVM) alters the expression of specific imprinted genes in bovine MII oocytes' Annual Conference of the International Embryo Transfer Society, January 2007

Katz-Jaffe MG, McCallie BR, Schoolcraft WB and Gardner DK. 'Gene expression of the snrpn locus in human blastocysts' 7<sup>th</sup> Preimplantation Genetic Diagnosis International Society Conference on, June 2007

McCallie BR, Katz-Jaffe MG, Gardner DK. 'In vitro maturation affects global transcriptome analysis' 40<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2007

Katz-Jaffe MG, Filipovits JA, McCallie BR, Gardner DK. 'Unique global transcriptome analysis of mouse trophectoderm and inner cell mass' 40<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2007

Katz-Jaffe MG, Stevens JM, Kearns WG, Gardner DK, Schoolcraft WB. 'Trophectoderm Biopsy and PGS is Feasible in Frozen Blastocyst Transfers' 63<sup>rd</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2007

Gardner DK, Hamilton B, McCallie B, Stevens J, Schoolcraft WB, Katz-Jaffe MG. 'Ammonium build up in the culture medium alters human embryonic metabolism and gene

expression' 63<sup>rd</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2007

Katz-Jaffe MG, McCallie BR, Filipovits JA, Schoolcraft WB, Gardner DK.

'Etiology of infertility affects subsequent blastocyst transcriptome' 63<sup>rd</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2007

Gardner DK, Hamilton B, McCallie BR, Schoolcraft WB, Katz-Jaffe MG. 'Ammonium accumulation in culture media impairs mouse embryonic development and gene expression' 24<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2008

McCallie BR, Parks JC, Janesch AM, Katz-Jaffe MG. 'Correlation of human embryo microRNA expression with infertility diagnosis' Annual Meeting of the American Society of Human Genetics, November 2008

Wells D, Fragouli E, Stevens J, Munne S, Schoolcraft WB, Katz-Jaffe, MG. 'High pregnancy rate after comprehensive chromosomal screening of blastocysts' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Parks J, Janesch A, Stevens J, Gardner DK, Schoolcraft WB, Katz-Jaffe MG. 'Unique proteomic fingerprints of human cumulus cells correlate with embryo morphology' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Katz-Jaffe MG, Fagouli E, Filipovits J, Wells D, Schoolcraft WB. 'Relationship between the human blastocyst secretome and chromosomal constitution' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Johnson MT, Vang P, Katz-Jaffe MG, McCallie BR, Gardner DK. 'Evaluation of prematurational development and interventions to improve meiotic maturation of

oocytes deficient in pyruvate dehydrogenase' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Fragouli E, Gutierrez C, Katz-Jaffe MG, Schoolcraft WB, Munne S, Wells D. 'Comprehensive aneuploidy screening of oocytes: scientific data and clinical application' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Fragouli E, Katz-Jaffe MG, Schoolcraft WB, Ross R, Munne S, Wells D. Comprehensive cytogenetic analysis of the human blastocyst stage' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Schlenker T, Stevens J, Rawlins M, McCormick S, Katz-Jaffe MG, Schoolcraft WB. 'Blastocyst vitrification following trophectoderm biopsy yields excellent survival rates' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Katz-Jaffe MG, McCallie BR, Treff NR, Miller KA, Scott RT, Schoolcraft WB. 'A novel profile of cumulus cell transcripts is associated with oocyte aneuploidy' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Cook-Andersen H, Stevens JM, Schoolcraft WB, Katz-Jaffe MG.'Male factor infertility and the incidence of chromosomally complex embryos' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Fragouli E, Goodall N, Katz-Jaffe MG, Schoolcraft WB, Munne S, Wells D. 'The role of aneuploidy in repeated implantation failure: implications for patient counseling and preimplantation genetic screening '64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

Janesch A, Parks J, Gardner DK, Schoolcraft WB, Katz-Jaffe MG. 'Sperm proteome reflects pregnancy outcome' 64<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, November 2008

S. Alfarawati, E. Fragouli, M. Katz-Jaffe, W.B. Schoolcraft, S. Munne, D. Wells 'Comprehensive cytogenetic analysis of the blastocyst stage: the impact of aneuploidy on embryo morphology' 25<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2009

Dagan Wells, Elpida Fragouli, Samer Alfarawaty, Santiago Munne, Bill Schoolcraft, Katz- Jaffe, MG. 'Significantly increased embryo implantation and improved birth rate after comprehensive chromosomal screening of blastocysts' 25<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2009

Larman, M. G., Katz-Jaffe, M., McCallie, B. Filipovits, J. A., and Gardner, D. K. 'Slow freezing negatively impacts gene expression of mouse blastocysts' 25<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2009

Fragouli, E.; Katz-Jaffe, M.; Alfarawati S., Schoolcraft, W.B.; Munne, S,; Wells D. 'Excess of chromosome errors in the oocytes of women with poor IVF outcome' 25<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2009

Katz-Jaffe MG, McCallie B, Janesch A, Crocker J, Gardner DK, Schoolcraft WB. 'The molecular signature of human sperm in association with blastocyst development' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Schoolcraft WB, Surrey E, Minjarez D, Gustofson R, Stevens JM, Katz-Jaffe MG. 'Towards single blastocyst transfer for infertile women in their early forties' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Janesch A, Parks JC, Stevens JM, Schoolcraft WB, Katz-Jaffe MG. 'Poor ovarian response is associated with an altered cumulus cell proteome' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

McCallie B, Parks JC, Janesch A, Stevens JM, Schoolcraft WB, Katz-Jaffe MG. 'Stability of microRNA in cumulus cells relative to embryo development' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Stevens JM, McCormick S, Treff N, Scott R, Schoolcraft WB, Katz-Jaffe MG. 'Maternal age related effects on chromosome error in human oocytes' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

McCormick S, Stevens JM, Treff N, Scott R, Schoolcraft WB, Katz-Jaffe MG. 'Is there a preferential day for trophectoderm biopsy of human blastocysts?' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Young D, Linden M, Stevens JM, Schoolcraft WB, Katz-Jaffe MG. 'Impact of an euploidy following unexplained recurrent miscarriage' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Katz-Jaffe MG, McCallie B, Schoolcraft WB. 'Association between altered blastocyst microRNA profiles and human infertility' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Parks JC, McCallie B, Janesch A, Schoolcraft WB, Katz-Jaffe MG. 'Mammalian trophectoderm gene expression is a predictor of IVF outcome' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

McReynolds S, Janesch A, Parks JC, Schoolcraft WB, Katz-Jaffe MG. 'Mammalian oocyte proteome relative to mid-reproductive age' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Parks JC, McCallie B, Li Q, Matzuk M, Schoolcraft WB, Katz-Jaffe MG. 'Effect of exogenous paracrine factors during human oocyte in vitro maturation' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Janesch A, McCallie B, Parks JC, Schoolcraft WB, Gardner DK, Katz-Jaffe MG. 'Impact of high protein diet on mouse oogenesis' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

Schlenker T, Stevens JM, Rawlins M, McCormick S, Katz-Jaffe MG, Schoolcraft WB. 'Clinical success with vitrification following trophectoderm biopsy for comprehensive

chromosomal screening' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

McCallie B, Filipovits J, Gardner DK, Schoolcraft WB, Katz-Jaffe MG. 'Human trophectoderm transcriptome at the time of implantation' 65<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2009

M. Katz-Jaffe, J Stevens, S McCormick, R Smith, W.B. Schoolcraft 'Relationship between cleavage stage morphology and comprehensive chromosome constitution' 26<sup>th</sup> Annual meeting of the European Society of Human Reproduction and Embryology, July 2010

Susanna McReynolds, Blair McCallie, Jason Parks, John Crocker, Ann Janesch, William B Schoolcraft and Mandy G Katz-Jaffe. 'Blastocyst dicer expression and miRNA biogenesis related to human infertility' 43<sup>rd</sup> Annual Meeting of the Society for the Study of Reproduction, July 2010

Jason Parks, Ann Janesch, Blair McCallie, David K Gardner, William B Schoolcraft and Mandy Katz-Jaffe 'Impact of maternal protein diet during mammalian oogenesis' 43<sup>rd</sup> Annual Meeting of the Society for the Study of Reproduction, July 2010

Blair R McCallie, Jason C Parks, Ann Janesch, William B Schoolcraft and Mandy G Katz-Jaffe. 'DNA methylation patterns in association with early pregnancy loss' 43<sup>rd</sup> Annual Meeting of the Society for the Study of Reproduction, July 2010

John Crocker, Blair McCallie, William B Schoolcraft and Mandy Katz-Jaffe. 'Developmental impact of the absence of single non-essential amino acids during mammalian embryo culture' 43<sup>rd</sup> Annual Meeting of the Society for the Study of Reproduction, July 2010

Stevens JM, Surrey E, Minjarez D, Gustofson R, Schoolcraft WB, Katz-Jaffe MG. 'Comprehensive chromosome screening significantly improves implantation rates following frozen blastocyst transfer' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Schoolcraft WB, Treff N, Ferry K, Stevens JM, Katz-Jaffe MG, Scott R. 'First clinical application of SNP microarray based 24 chromosome aneuploidy screening of human blastocysts' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

McCormick S, Stevens JM, Rawlins M, Smith R, Schoolcraft WB, Katz-Jaffe MG. 'Day 5 blastocyst morphology correlates with comprehensive chromosome constitution and outcome' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

McReynolds S, Kiemele L, Stevens JM, Hansen K, Schoolcraft WB, Katz-Jaffe MG. 'Noninvasive blastocyst secretome analysis reflects comprehensive chromosome aneuploidy' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Schlenker T, Stevens JM, Rawlins M, McCormick S, Katz-Jaffe MG, Schoolcraft WB. 'Healthy deliveries following vitrification of biopsied blastocysts' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Young D, Linden M, Stevens JM, Kearns W, Schoolcraft WB, Katz-Jaffe MG. 'Direct association between unbalanced sperm and embryos among male translocation carriers' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Smith R, Stevens JM, Schlenker T, McCormick S, Schoolcraft WB, Katz-Jaffe MG. 'Sibling immature oocytes exhibit higher rates of chromosomal aneuploidies' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Katz-Jaffe MG, Surrey E, Minjarez D, Gustofson R, Stevens JM, Schoolcraft WB. 'Normal ovarian reserve does not predict a lower incidence of comprehensive chromosome aneuploidies' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Schlenker T, Stevens JM, Katz-Jaffe MG, Schoolcraft WB. 'The efficiency of oocyte vitrification for donor oocyte cycles and oocyte banking in ART' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Janesch A, McCallie B, Crocker J, Stevens JM, Schoolcraft WB, Katz-Jaffe MG. 'Differential sperm RNA profiles are associated with subsequent blastocyst development' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Crocker J, McReynolds S, Borgeson J, Thompson C, Schoolcraft WB, Katz-Jaffe MG. 'Sperm proteomic profiles reflect the occurrence of DNA fragmentation' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Loper R, Treff N, Parks JC, Scott R, Schoolcraft WB, Katz-Jaffe MG. 'Alterations of mitotic checkpoint genes play a role in embryonic chromosome mosaicism' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

McCallie B, Parks JC, Janesch A, Stevens JM, Schoolcraft WB, Katz-Jaffe MG. 'Altered cumulus cell transcripts in association with non-viable outcome' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Parks JC, McCallie B, Janesch A, Schoolcraft WB, Katz-Jaffe MG. 'Implication of complement and coagulation cascade in spontaneous early pregnancy loss' 66<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2010

Jason Parks, John Crocker, William B Schoolcraft and Mandy G Katz-Jaffe. 'Advanced Paternal Age Negatively Impacts In Vivo Fertilization and In Vitro Blastocyst Development' 44<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, August 2011

Susanna McReynolds, Monika Dzieciatkowska, Kirk C Hansen, William B Schoolcraft and Mandy G Katz-Jaffe. 'Impact of maternal age on the human cumulus cell proteome' 44<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, August 2011

Stevens J, Loper R, Buttermore H, Surrey E, Schoolcraft WB, Katz-Jaffe MG. 'Repeat CCS cycles will typically result in some euploid blastocysts for transfer in women of advanced maternal age' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Katz-Jaffe MG, Crocker J, Parks JC. 'Advanced paternal age negatively impacts reproductive outcome' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

McReynolds S, Mitchell S, Dzieciatkowska M, Hansen D, Schoolcraft WB, Katz-Jaffe MG. 'The molecular signature of cumulus cells is compromised in infertile women of advanced maternal age' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

McCallie B, Parks JC, Loper R, Buttermore H, Schoolcraft WB, Katz-Jaffe MG. 'Human blastocysts exhibit unique microRNA profiles in relation to maternal age and chromosome

constitution' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Parks JC, McCallie B, Vanderlinden L, Katz-Jaffe MG. 'Trophectoderm gene expression profiles: Development of a predictive model for IVF outcome' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Strieby A, McCallie B, Minjarez D, Katz-Jaffe MG. 'Expression of DNA repair genes in blastocysts derived from infertile women with PCOS' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Schoolcraft WB, Schlenker T, Surrey E, Minjarez D, Gustofson R, Katz-Jaffe MG. 'Single blastocyst transfer after comprehensive chromosome screening and vitrification results in improved clinical outcome' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Katz-Jaffe MG, Surrey E, Minjarez D, Gustofson R, Stevens JM, Schoolcraft WB. 'Abnormal ovarian reserve predicts a higher incidence of aneuploid blastocysts' 67<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2011

Blair McCallie, Robyn Loper, Holly Buttermore, William B Schoolcraft, Mandy Katz-Jaffe. 'Apoptosis is not the mechanism for embryo self correction of aneuploidy at the blastocyst stage' The American Society of Human Genetics 61<sup>st</sup> Annual Meeting, October 2011

Alyssa Strieby, Jason C Parks, Blair R McCallie, William B Schoolcraft, Mandy G Katz-Jaffe 'Expression of critical developmental genes is impacted by the age of the oocyte' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Shane Mitchell, Mary Linden, Danielle Young, Nathan Treff, William B Schoolcraft and Mandy G Katz-Jaffe 'The incidence of chromosome errors differs at the preimplantation stage from that observed later in pregnancy' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Blair R McCallie, Alyssa Streiby, Jason C Parks, Shane Mitchell, William B Schoolcraft, Mandy G Katz-Jaffe 'Unique cumulus cell microRNA expression profiles predict IVF outcome and live

birth' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012 Lauren Roth, Blair R McCallie, Ruben Alvero, William B Schoolcraft, Debra Minjarez, Mandy G Katz-Jaffe 'Human follicular fluid contains abundant microRNAs some of which are altered in

expression with polycystic ovarian syndrome' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

William B Schoolcraft, Eric Surrey, Debra Minjarez, Robert L Gustofson, Richard T Scott Jr and Mandy G Katz-Jaffe 'Comprehensive chromosome screening (CCS) with vitrification

results in improved clinical outcome in women >35 years: a randomized control trial' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Sue McCormick, John Stevens, Robin Smith, Richard T Scott Jr, William B Schoolcraft, Mandy G Katz-Jaffe 'Unexplained recurrent miscarriage: can preimplantation comprehensive

chromosome screening (CCS) improve outcomes?' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

M.G. Katz-Jaffe, S McReynolds, J. Stevens, M. Dzieciatkowska, K. Hansen, W.B. Schoolcraft. 'Protein secretome profiles reliably distinguish embryonic stages of development and predict successful IVF outcome' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Susanna McReynolds, Monika Dzieciatkowska, Kirk C Hansen, William B Schoolcraft, Mandy G Katz-Jaffe 'Alterations in the sperm proteome may identify idiopathic infertility and poor IVF outcome' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

John Stevens, Mary Rawlins, Ann Janesch, Nathan Treff, William B Schoolcraft, Mandy G Katz-Jaffe 'Time lapse observation of embryo development identifies later stage morphology

based parameters associated with blastocyst quality but not chromosome constitution' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Nathan Treff, Mandy Katz-Jaffe, Richard T Scott Jr, William B Schoolcraft 'Ongoing pregnancy rate after trophectoderm (TE) biopsy, blastocyst vitrification, and simultaneous single gene

disorder (SGD) and comprehensive chromosomal aneuploidy screening (CCS)' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Eric Forman, Nathan Treff, John Stevens, Mandy Katz-Jaffe, Richard T Scott Jr, William B Schoolcraft 'Embryos whose polar bodies (PBS) had a reciprocal chromosomal abnormality are almost always euploid, as a result of correction of premature separation of sister chromatids

(PSSC)' 68<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2012

Blair McCallie, Jason Parks, Nathan Treff, Richard T Scott, William Schoolcraft, Mandy G Katz-Jaffe 'Cumulus cells microRNA profiles are associated with oocyte aneuploidy' The American Society of Human Genetics 62<sup>nd</sup> Annual Meeting, October 2012

Mandy G Katz-Jaffe, Blair McCallie, John Stevens, William Schoolcraft 'Involvement of sperm miRNAs in unidentified male factor infertility' The American Society of Human Genetics 62<sup>nd</sup> Annual Meeting, October 2012

Alyssa Strieby, Blair McCallie, Jason Parks, William B Schoolcraft, Mandy G Katz-Jaffe 'Blastocysts derived from women of advanced maternal age have compromised gene expression profiles that may impact their implantation potential but do not influence the endometrial transcriptome' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Susanna McReynolds, Monika Dzieciatkowska, Blair McCallie, Kirk C Hansen, William B Schoolcraft, Mandy G Katz-Jaffe 'Cumulus cell protein expression reflects oocyte chromosome constitution' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Susanna McReynolds, John Stevens, William Schoolcraft, Mandy G Katz-Jaffe 'Cytokine profiling of the human blastocyst secretome revealed expression of IL-6, IL-8 and TNF- $\alpha$ ' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Jason C Parks, Susanna McReynolds, Blair R McCallie, Alyssa Strieby, William B Schoolcraft, Mandy G Katz-Jaffe 'The molecular profile of uterine secretions is predictive of endometrial receptivity' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Blair R McCallie, Jason C Parks, Alyssa Strieby, Shane Mitchell, William B Schoolcraft, Mandy G Katz-Jaffe 'Regulation of DNA methylation in human blastocysts is associated with chromosomal monosomy and decreased implantation potential' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

William B Schoolcraft, Susanna McReynolds, Jason C Parks, Monika Dzieciatkowska, Kirk C Hansen, Mandy G Katz-Jaffe 'Discovery of fertility biomarkers in the dominant follicle from a natural cycle' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

John Stevens, Megan Schweitz, Ashley Geka, Shane Mitchell, William B Schoolcraft, Mandy G Katz-Jaffe 'No embryo gender bias is observed following blastocyst comprehensive

chromosome screening' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Megan Schweitz, Ashley Geka, John Stevens, William B Schoolcraft, Mandy G Katz-Jaffe 'Elevated BMI is not associated with increased chromosomal aneuploidy or poor IVF outcome

following blastocyst comprehensive chromosome screening and a frozen embryo transfer' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Mandy G Katz-Jaffe, Eric Surrey, Debra Minjarez, Robert L Gustofson, John Stevens and William B Schoolcraft 'Can the transfer of euploid blastocysts in a frozen embryo transfer overcome repeated IVF failure?' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Ann Schneiderman, Jason Parks, Shane Mitchell, John Stevens, William B Schoolcraft and Mandy G Katz-Jaffe 'Time lapse observation during embryo development differentiates

blastocyst quality but not chromosome constitution or gender' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Sue McCormick, Mary Linden, Danielle Young, Diane Klepacka, William B Schoolcraft, Mandy G Katz-Jaffe 'Low AMH levels do not predict a higher incidence of aneuploid

blastocysts in young infertility patients (<35 years)' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Terry Schlenker, John Stevens, Robin Smith, Mary Rawlins, Mandy G Katz-Jaffe, William Schoolcraft 'Oocyte vitrification is a viable reproductive option for women seeking fertility preservation' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

William B Schoolcraft, Eric Surrey, Debra Minjarez, Robert L Gustofson, Richard T Scott Jr and Mandy G Katz-Jaffe 'Transfer of warmed euploid blastocysts significantly improves live birth rates for infertility patients of advanced maternal age (>35 years)' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Eric Forman, Nathan Treff, Mandy Katz-Jaffe, Richard T Scott Jr, William B Schoolcraft 'SNP array intensity analysis of the 1st polar body (PB1) can reliably identify premature separation of

sister chromatids (PSSC) in meiosis I (MI): a blinded validation study' 69<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2013

Megan Schweitz, Susanna McReynolds, William B Schoolcraft and Mandy G Katz-Jaffe. The frequency, type and classification of chromosome errors differs at the preimplantation stage

from that observed during pregnancy. The American Society of Human Genetics 64<sup>th</sup> Annual Meeting, October 2014

Jason C Parks, Blair McCallie, Alyssa Strieby, Susanna McReynolds, William B Schoolcraft, Mandy G Katz-Jaffe. Non-invasive omics analysis of endometrial secretions 24 hours prior to

frozen embryo transfer is predictive of implantation outcome. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Jason E Swain, Mandy G Katz-Jaffe, John Stevens, William B Schoolcraft. Extending ovarian stimulation in patients with diminished ovarian reserve beyond normal trigger criteria of two

follicles ≥18mm increases oocyte yield and maturity but not fertilization rates. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Blair R McCallie, Alyssa Strieby, Jason C Parks, William B Schoolcraft, Mandy G Katz-Jaffe. Individual corona cell RNA sequencing revealed transcripts associated with oocyte competence and live birth. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Blair R McCallie, Jason C Parks, Alyssa Strieby, William B Schoolcraft, Mandy G Katz-Jaffe. Hypomethylation of monosomy chromosomes may reflect decreased implantation potential. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Diane Klepacka, Danielle Young, Laura Brzeskiewicz, William B Schoolcraft, Mandy G Katz-Jaffe. Infertility patients with chromosome inversions are susceptible to an inter-chromosomal effect. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Alyssa Strieby, Blair R McCallie, Jason C Parks, William B Schoolcraft, Mandy G Katz-Jaffe. Blastocysts from women of advanced maternal age have compromised transcription of key implantation and development genes. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Sue McCormick, John Stevens, Ann Schneiderman, Robin Smith, William B Schoolcraft, Mandy G Katz-Jaffe. Chromosome errors involving large metacentric and submetacentric chromosomes are more common in young infertility patients. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Mandy G Katz-Jaffe, Jason C Parks, Blair R McCallie, Alyssa Strieby, William B Schoolcraft. Infertility diagnosis has a significant impact on the developing blastocyst's transcriptome. 70<sup>th</sup> Annual Meeting of the American Society of Reproductive Medicine, October 2014

Jason C Parks, Alyssa L Patton, Blair R McCallie, Darren K Griffin, William B Schoolcraft, Mandy G Katz-Jaffe. Secreted endometrial microRNA gene regulators are critical for successful embryo implantation. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Alyssa L Patton, Blair R McCallie, Jason C Parks, William B Schoolcraft, Mandy G Katz-Jaffe. Exosome bound micrornas transcriptionally regulate embryo-endometrial dialogue impacting implantation potential for AMA patients. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015 Blair R McCallie, Jason C Parks, Alyssa L Patton, Darren K Griffin, William B Schoolcraft, Mandy G Katz-Jaffe. Chaotic human blastocysts display altered microRNA regulation promoting downstream apoptotic gene transcription leading to embryo arrest. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Brian Hixon, Jason C Parks, John Stevens, William B Schoolcraft, Mandy G Katz-Jaffe. Time lapse kinetic markers enable early identification of developmentally delayed euploid blastocysts. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

April E Batcheller, John Stevens, Jason E Swain, William B Schoolcraft, Mandy G Katz-Jaffe. Zygote accumulation for chromosomal screening achieves ongoing clinical pregnancies for diminished ovarian reserve patients with previous IVF failure. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

John Stevens, Sue McCormick, Ann Schneiderman, William B Schoolcraft, Mandy G Katz-Jaffe. Pregnancy loss is significantly increased in male factor oligoasthenozoospermia patients despite the transfer of a euploid blastocyst. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Susanna McReynolds, Megan Schweitz, Danielle Young, Diane Klepacka, William B Schoolcraft, Mandy G Katz-Jaffe. The incidence of chaotic blastocysts in women ≥40 years old dramatically increases, while single errors decrease, as a result of severe chromosome instability. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

L. A. Kondapalli, R. Collins, W. B. Schoolcraft, M. Katz-Jaffe. Perinatal outcomes among IVF singletons are reassuring after comprehensive chromosomal screening and frozen blastocyst transfer. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

L. A. Kondapalli, L. Munkwitz, R. Collins, D. A. Minjarez, W. B. Schoolcraft, M. Katz-Jaffe. Elevated serum progesterone reduces the likelihood of live birth after frozen transfer of euploid embryos: too much of a good thing? 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Michelle M Denomme Tignanelli, William B Schoolcraft, Mandy Katz-Jaffe. Epigenetic dysregulation observed in monosomy blastocysts may contribute to their negligible implantation potential. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Mandy G Katz-Jaffe, Eric Surrey, Debra Minjarez, Robert L Gustofson, Laxmi Kondapalli, John Stevens, William B Schoolcraft. Single euploid blastocyst transfer is a viable clinical option for AMA patients up to 42 years: analysis of 1,000 consecutive single frozen embryo transfers. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

J.E. Swain, W.B. Schoolcraft, MG Katz-Jaffe. Dual trophectoderm biopsy on the same blastocyst does not impair clinical outcomes. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Megan Schweitz, Susanna McReynolds, Marla McGarvey, John Stevens, William B Schoolcraft, Mandy G Katz-Jaffe. The impact of comprehensive chromosome screening on embryo selection of day 5 blastocysts. 71st Annual Meeting of the American Society of Reproductive Medicine, October 2015

Gole J, Mullen T, Celia G, Wagner-Coughlan C, Kaplan B, Katz-Jaffe M, Schoolcraft W, Umbarger M, Analytical Validation of a Novel Next-Generation Sequencing Based Preimplantation Genetic Screening Technology. PCRS March 2016 – Allied Health professional Award

Blair R McCallie, JC Parks, DK Griffin, WB Schoolcraft, MG Katz-Jaffe. A longitudinal study investigating the impact of paternal aging on the methylome of the mouse sperm genome. 49<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2016

Jason C Parks, BR McCallie, DK Griffin, WB Schoolcraft, MG Katz-Jaffe. Association of beta-catenin regulators with successful embryo implantation. 49<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2016

Michelle M Denomme Tignanelli, BR McCallie, JC Parks, WB Schoolcraft, MG Katz-Jaffe. Epigenetic dysregulation observed at imprinting control regions in aneuploid blastocysts may contribute to their compromised developmental potential. 49<sup>th</sup> Annual Meeting of the Society for the Study of Reproduction, July 2016

E.Surrey, M. Katz-Jaffe, L. Kondapalli, R. Gustofson, W. Schoolcraft. Prolonged administration of GNRH agonist (GNRHa) prior to embryo transfer in endometriosis (endo) and  $\alpha\nu\beta3$  integrin (int) negative patients undergoing in vitro fertilization-embryo transfer (IVF-ET): the impact of

freeze-all cycles. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

AE Batcheller, J Stevens, WB Schoolcraft, M Katz-Jaffe. Zygote banking offers poor prognosis later stage reproductive patients the chance of family building. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Lindsey Munkwitz, William B Schoolcraft and Mandy Katz-Jaffe. Natural anti-oxidant supplementation prior to infertility treatment results in excellent clinical outcomes for infertility patients with prior IVF failures. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Blair R McCallie, Jason C Parks, Michelle Denomme Tignanelli, William B Schoolcraft and Mandy Katz-Jaffe. RNA sequencing of aneuploid blastocysts revealed enriched pathways

associated with compromised implantation potential. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Michelle Denomme Tignanelli, Blair McCallie, Jason Parks, William Schoolcraft, Mandy Katz-Jaffe. Altered methylome in normozoospermic males contributes to poor embryogenesis. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Mandy Katz-Jaffe, Megan Schweitz, Susanna McReynolds, John Stevens and William B Schoolcraft. Blastocyst scoring systems provide evidence of euploid predictability. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016 Annette King, Katherine Hornberger, Danielle Young, Diane Klepacka, William B Schoolcraft and Mandy Katz-Jaffe. Excellent embryo development and IVF outcomes for patients with germline BRCA1 or BRCA2 mutations. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

John Stevens, Ann Schneiderman, Karen Maruniak, Brandee Findley, William B Schoolcraft and Mandy Katz-Jaffe. Euploid blastocyst transfer is a viable clinical option for male factor

infertility with high sperm DNA fragmentation. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Sue McCormick, Kim LaRocque, Kalyn Hamme, John Stevens, William B Schoolcraft and Mandy Katz-Jaffe. Compromised developmental competence of day 7 human blastocysts. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Mandy Katz-Jaffe, Lauren Henry, Jason C Parks, Blair R McCallie and William B Schoolcraft. Embryo-endometrial dialogue is altered in endometriosis patients through microRNA regulation. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Mandy Katz-Jaffe, Brittany Brown, Monique R Mansfield, John Stevens, Courtney Pospisil and William B Schoolcraft. Altered live birth gender ratio following frozen single euploid blastocyst transfer. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Susanna McReynolds, Megan Schweitz, Sue McCormick, Jason C Parks, William B Schoolcraft and Mandy Katz-Jaffe. Unraveling the complexities of mosaicism in human blastocysts. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Jason C Parks, Blair McCallie, Julie A Reisz, Matthew Wither, William B Schoolcraft, Mandy Katz-Jaffe. Maternal endometrial secretions 24 hours prior to frozen embryo transfer is

predictive of implantation outcome. 72<sup>nd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2016

Michelle Denomme Tignanelli, Blair McCallie, Jason Parks, William Schoolcraft, Mandy Katz-Jaffe. Epigenetic and transcriptional dysregulation in aneuploid embryos. Keystone Symposia Conference: Epigenetics and Human Disease: Progress from Mechanisms to Therapeutics, January 2017

Mandy Katz-Jaffe, Eric Surrey, John Stevens, Jason Swain, William B Schoolcraft. Sex chromosome aneuploidy is associated with younger parental ages. 65<sup>th</sup> Annual Pacific Coast Reproductive Society Meeting, March 2017

Mandy Katz-Jaffe, Susanna McReynolds, Kelly De Klerk, Lauren Henry, Megan Schweitz, Jason E Swain and William B Schoolcraft. Extremely low incidence of mosaicism in human blastocysts mimics occurrence in natural and IVF clinical pregnancies. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Mandy Katz-Jaffe, Susanna McReynolds, Kelly de Klerk, Lauren Henry, Jason Parks, Sue McCormick and William Schoolcraft. The inner cell mass confirms deletion syndromes detected in trophectoderm biopsies. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Sue McCormick, Robin Smith, Courtney Pospisil, Nathan McCubbin, William Schoolcraft and Mandy Katz-Jaffe. Calcium ionophore treatment after ICSI improves blastocyst development for male factor indications as well as patients with only a history of poor blastocyst

development. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Tonie Patrick, Julie VonFeldt, Monique Mansfield, William Schoolcraft and Mandy Katz-Jaffe. Good prognosis infertility patients can build families with a single oocyte retrieval and successive euploid blastocyst transfers. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Michelle M Denomme Tignanelli, Blair R McCallie, Keith Booher, William Schoolcraft, Mandy Katz-Jaffe. The embryonic methylome and subsequent transcriptome is directly impacted by male factor infertility. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine. October 2017

Nathan McCubbin, Blair R McCallie, Jason C Parks, William Schoolcraft, and Mandy Katz-Jaffe. Disrupted sperm MiRNA expression profiles revealed a fingerprint of impaired spermatogenesis in oligozoospermia males. 73<sup>rd</sup> Annual Meeting of the American Society

for Reproductive Medicine, October 2017

Mandy Katz-Jaffe, Jason Parks, Blair McCallie, Michelle Tignanelli and William Schoolcraft. Paternal aging over a natural lifetime is directly associated with genetic and epigenetic

alterations in the male gamete. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Blair R McCallie, Sue McCormick, Darren Griffin, William Schoolcraft and Mandy Katz- Jaffe. Histone modifications are involved with chromosome chaos in advanced maternal age

human blastocysts. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Jason Parks, Michelle Denomme Tignanelli, Nathan McCubbin, Blair McCallie, William Schoolcraft, Mandy Katz-Jaffe. Advanced paternal age directly impacts placental epigenetic mechanisms. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Santiago Munné, Brian Kaplan, John Frattarelli, Mathias Gysler, Tim Child, Gary Nakhuda, F. Nicholas Shamma, Kaylen Silverberg, Mandy Katz-Jaffe, Dagan Wells, Tony Gordon, and Susan Willman. Global multicenter randomized controlled trial comparing single embryo transfer with embryo selection by preimplantation genetic screening using next-generation

sequencing versus morphologic assessment. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Katherine Hornberger, Amy Bartoli, Annette King, Nicolette Bachman, Danielle Young, Diane Klepacka, William B Schoolcraft and Mandy Katz-Jaffe. Maternal obesity is not associated

with increased miscarriage rates following euploid blastocyst transfer. 73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

Amy Bartoli, Katherine Hornberger, Annette King, Nicolette Bachman, Danielle Young, Diane Klepacka, William Schoolcraft and Mandy Katz-Jaffe. Advanced paternal age is associated with a decrease in fertilization rates and increase in blastocyst sex chromosome aneuploidy.

73<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2017

BR McCallie, JC Parks, MM Denomme, NI McCubbin, DK Griffin, WB Schoolcraft, MG Katz-Jaffe. Advanced Maternal Age Impacts Placental Epigenetics Contributing to Potential

Compromised Development. 51<sup>st</sup> Annual Meeting of the Society for the Study of Reproduction, July 2018

JC Parks, BR McCallie, NI McCubbin, DK Griffin, WB Schoolcraft, MG Katz-Jaffe. Uterine miRNAs Reflect the Unique Microenvironment In an Individual Murine Horn During the

Window of Implantation. 51<sup>st</sup> Annual Meeting of the Society for the Study of Reproduction, July 2018

Blair R McCallie, Jason C Parks, Devon Trahan, Kenneth Jones, Breanne Coate, Darren K Griffin, William B Schoolcraft and Mandy G Katz-Jaffe. Key molecular embryonic signaling

networks are compromised with maternal reproductive aging. 74<sup>th</sup> Annual Meeting of the American Society for Reproductive Medicine, October 2018

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