CURRICULUM VITAE

NAME: Raymond W. Ke M.D., FACOG, FRCSC, HCLD.

BUSINESS ADDRESS: Kutteh Ke Fertility Associates of Memphis, PLLC.

80 Humphreys Center, Suite 307

Memphis, TN 38120 Ph: 901-747-2229 Fax: 901-747-4446

E-MAIL rke@fertilitymemphis.com

BIRTHDATE: August 10, 1962

MARITAL STATUS: Divorced

CHILDREN: Marissa

Jessica Paulina

EDUCATION:

Undergraduate: Dalhousie University

Halifax, Nova Scotia

1979 - 1982 B.Sc. Biology

Medical School: Dalhousie University

Halifax, Nova Scotia

1982 - 1986

M.D.

Internship: Rotating internship

Victoria General Hospital Victoria, British Columbia

1986 - 1987

Residency: Obstetrics and Gynecology

Department of Obstetrics, Gynecology and Reproductive

Sciences

University of Manitoba Winnipeg, Manitoba

July 1, 1988 - June 30, 1992.

Fellowship: Reproductive Endocrinology & Infertility

Department of Obstetrics & Gynecology University of Tennessee, Memphis

Memphis, Tennessee

July 1, 1992 - June 30, 1994

HONORS AND AWARDS: Vice-President of Medical Education

Dalhousie Medical School

Class of 1986

Dr. Max Rady Memorial Award 1988.

"Outstanding Resident in Obstetrics and Gynecology."

University of Manitoba

Wyeth Award for Excellence, 1989

Best resident paper

"Second Trimester Abortion Revisited"

Dr. Michael Bruser Memorial Award 1990. "Excellence in the Field of Fetal Physiology." University of Manitoba

Golden Apple Award 1998, 2000 and 2009 "Excellence in Medical Student Teaching." University of Tennessee Health Science Center

Best Doctors in America 2002/2003, 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2009/10, 2010/11, 2011/12, 2012/13, 2013/14, 2014/15, 2015/16, 2016/17, 2017/18

PRIVATE PRACTICE:

Family Practice

Victoria, British Columbia July 1, 1987 - June 30, 1988

Kutteh Ke Fertility Associates of Memphis, PLLC Memphis, TN March 1, 2003 to present

ACADEMIC APPOINTMENTS: Assistant Professor

Reproductive Endocrinology & Infertility Department of Obstetrics & Gynecology University of Tennessee, Memphis July 1, 1994 – June 30, 2001

Director of In Vitro Fertilization Reproductive Endocrinology & Infertility Department of Obstetrics & Gynecology University of Tennessee, Memphis February 1, 1995 – present

Associate Professor Reproductive Endocrinology & Infertility Department of Obstetrics & Gynecology University of Tennessee, Memphis July 1, 2001 – June 30 2010

Professor

Reproductive Endocrinology & Infertility Department of Obstetrics & Gynecology University of Tennessee, Memphis July 1, 2010 – July, 2012

Assistant Clinical Professor Reproductive Endocrinology & Infertility Department of Obstetrics & Gynecology

Vanderbilt University

December 5, 2013 – present

Consultant Gynecologist Department of Gynecology

St Jude Children's Research Hospital

December 18, 2013 – present

MEDICAL LICENSURE:

Tennessee State Medical License #MD0000023920

Issued July 28, 1992

Arkansas State Medical License

R-4393

Issued December 11, 1992

Medical Council of Canada

#63594

Issued June 16, 1987

College of Physicians and Surgeons of Manitoba

SPECIALTY CERTIFICATION: The Royal College of Physicians and Surgeons of Canada

Obstetrics and Gynecology

May 31, 1992

The American Board of Obstetrics and Gynecology

General Obstetrics and Gynecology Certified - November 17, 1995

The American Board of Obstetrics and Gynecology

Reproductive Endocrinology

Subspecialty certificate - April 7, 1997

The American Board of Bioanalysts High Complexity Laboratory Director

September 1998 - present

SOCIETY MEMBERSHIPS: American College of Obstetricians and Gynecologists

Past Junior Fellow Section Chairman Tennessee Section Advisory Council

American Society for Reproductive Medicine

Society for Assisted Reproductive Technology Society for Reproductive Endocrinology

Society of Obstetricians and Gynecologists of Canada

Past Jr. Fellow Executive Member

Canadian Fertility and Andrology Society

American Association of Bioanalysts

HOSPITAL APPOINTMENTS: Baptist Memorial Hospital

899 Madison Ave. Memphis, TN 38146

Methodist Hospitals of Memphis

1265 Union Ave Memphis, TN 38104

COMMITTEES: Institutional Review Board

University of Tennessee Health Science Center

1998-2004

Executive Medical Board
East Memphis Surgery Center

Memphis, TN 2008-present

Continuing Medical Education Committee American Society of Reproductive Medicine

2009-2015

COMMUNITY: Board of Trustees

Vice President, Committee on Trustees

Lausanne Collegiate School

Memphis, TN 2010 to 2018

Board of Governors New Day Children's Theater Collierville, TN 2015 to present

PUBLICATIONS (JOURNALS):

Ke RW, Vohra M, Casper R. Prolonged inhibition of human myometrial contractility by intermittent isoproterenol. Am J Obstet Gynecol 149:841, 1984.

Ke RW, Taylor PJ. Endometrial ablation to control excessive uterine bleeding. Human Reprod 6(4):574-580, 1991.

Daniell JF, Kurtz BR, **Ke RW**. Hysteroscopic endometrial ablation using the rollerball electrode. Obstet Gynecol. 80 (3):329, 1992.

Ke RW, Dockter ME, Majumdar G, Buster JE, Carson SA. Flow cytometry provides rapid and highly accurate detection of antisperm antibodies. Fert Steril 63(4):902-906, 1995.

Ke RW, Buster JE, Dockter ME. Separation of antibody-positive sperm by magnetic cell sorting. J Reprod Immunol 32(2):171-191, 1996.

Ke RW, Portera SG, Bagous W, Lincoln SR. A randomized, double-blinded trial of preemptive analgesia in laparoscopy. Obstet Gynecol 92:972-5, 1998.

Lincoln SR, **Ke RW**, Kutteh WH. Screening for hypothyroidism in infertile women. J Reprod Med 44: 455-7,1999.

Craig, LJ, **Ke RW**, Kutteh WH. Association of insulin resistance in women with a history of recurrent pregnancy loss. Fertil Steril 78(3):487-490,2002.

Ghazeeri GS, Phillips OP, Emerson DS, Kutteh WH, **Ke RW**. Livebirth after treatment of a cornual heterotopic pregnancy with fetal intracardiac potassium chloride: a case report and literature review. J Reprod Med 47:1038-1040, 2002.

Ghazeeri GS, Kutteh WH, Bryer-Ash M, Haas D, **Ke RW**. Effect of rosiglitazone on spontaneous and clomiphene citrate-induced ovulation in women with polycystic ovary syndrome. Fertil Steril 79 (3): 562-566, 2003.

Ke RW, Pace D, Ahokas RA. Effect of short-term hormone replacement therapy on oxidative stress and endothelial function in African-American and Caucasian postmenopausal women. Fertil Steril 79 (5): 1118-1122, 2003.

Hughes TA, Pace DT, **Ke RW**, Tolley EA, Qureshi N, Stentz F. Lipoprotein compositional changes with combination hormone therapy (conjugated estrogen and medroxyprogesterone) in African American Women. Endocr Pract 10(3): 179-186, 2004.

Wells MD, Kutteh WH, **Ke RW**. Change in serum luteinizing hormone affects the outcome of in vitro fertilization. Hum Reprod 21(1): 615-621, 2006.

Ke RW, Smith XL, Page AM, Kutteh WH. Effect of weight and insulin-sensitization agents on polycystic ovarian syndrome (PCOS) associated infertility. J Reprod Med 53 (3), 212-216, 2008

Jaslow CR, Patterson KS, Cholera S, Jennings LK, **Ke RW**, Kutteh WH. CD9 expression by human granulosa cells and platelets as a predictor of fertilization success during IVF. Obstet Gynecol Intl (2010), Article ID 192461, 2010

Block-Abraham D, **Ke RW**, Bloomer RL. Impact of serum estradiol on biomarkers of oxidative stress in polycystic ovarian syndrome and ovulatory women. Clin Med Insights: Womens's Health 5, 45-51, 2012

Shu Y, Kutteh WH, **Ke RW**. Live birth of healthy twins following transfer of re-cryopreserved blastocysts developed from frozen embryos recovered from a malfunctioning freezer. J Assist Reprod Genet.2012 Dec 29. [Epub ahead of print]

Green DM, Zhu L, Zhang N, Sklar CA, **Ke RW**, Kutteh WH, Klosky JL, Spunt SL, Metzger ML, Navid F, Srivastava D, Robison LL, Hudson MM. Lack of specificity of plasma concentrations of inhibin B and follicle-stimulating hormone for identification of azoospermic survivors of childhood cancer: a report from the St Jude lifetime cohort study. J Clin Oncol 2013; 31(10):1324-8.

Brezina PR, Ding J, Klosky JL, **Ke RW**, Tillmanns TD. Fertility preservation through oocyte cryopreservation in a patient with ovarian dysgerminocarcinoma. <u>J Reprod Med</u>. 2015;60:441-4444.

Green DM, Zhu L, Wang M, Chemaitilly W, Srivastava D, Kutteh WH, **Ke, RW**, Sklar CA, Pui CH, Kun LE, Ribeiro RC, Robison LL, Hudson MM. Effect of Cranial Irradiation on Sperm Concentration of Adult Survivors of Childhood Acute Lymphoblastic Leukemia. A Report from the St. Jude Lifetime Cohort Study. Hum Reprod. 2017 June;32(6):1192-1201. https://doi.org/10.1093/humrep/dex082

PUBLICATIONS (BOOK CHAPTERS and REVIEWS):

Ke RW, Endometrial Ablation: An alternative to hysterectomy. Clin Obstet Gynecol 40(4):914-927, 1997.

Ke RW. Polycystic Ovarian Syndrome: The androgenized adolescent. J Pediatr Adolesc Gynecol 9:159-162, 1996.

Ke RW, Management of Menopause. In: Ling FW and Duff P, (eds). *Obstetrics and Gynecology: Principles of Practice*. McGraw-Hill, New York, 2001.

Ke RW. A Preemptive Strike Against Surgical Pain. Contemp. OB/GYN 46(4):65-75, 2001.

Smith RP, Bradley LD, **Ke RW**, Strickland JL (eds). Clinical Management of Abnormal Uterine Bleeding. APGO Educational Series. Association of Professors of Gynecology and Obstetrics, Crofton, MD, 2002

Craig LB, **Ke RW**. Estrogens and Progestins: Endogenous and Pharmaceutical Preparations. Contemporary Clinical Gynecology and Obstetrics 2(3): 255-263, 2002.

Ke RW, Kutteh WH. Controlling PCOS (Part 4): What role should rosiglitazone play? Cont Obstet Gynecol 49(3): 33-48, 2004.

Brezina PR, **Ke RW**, Ding J, Kutteh WH. The impact of elective egg freezing technology (2012). J Fert In Vitro 2:e120. doi:10.4172/2165-7491.1000e120.

Brezina PR, **Ke RW**, Kutteh WH. Preimplantation genetic screening: a practical guide. Clin Med Insights: Reproductive Health 7, 37-42, 2013

Ke RW. Endocrine basis for recurrent pregnancy loss. Obstet Clinics N Am 41, 103-112, 2014.

Kutteh WH, **Ke RW**, Brezina PR. A New Algorithm for Evaluation and Treatment of Recurrent Pregnancy Loss. In: Carp HJA (Ed). *Recurrent Pregnancy Loss: Causes, Controversies, and Treatment*, 2nd Ed. CRC Press, 2014.

Brezina PR, Kutteh WH, Bailey AP, Ding J, **Ke RW**. Preimplantation Genetic Screening: Pitfalls and Opportunities. OA Genetics 2014 Feb 18;2(1):2.

Brezina PR, Kutteh WH, Bailey AP, **Ke RW**, Ding J, Klosky J. Fertility Preservation in the Age of Assisted Reproductive Technologies. Obstet Gynecol Clin N Am 42, 39-54, 2015.

Brezina PR, Kutteh WH, Bailey AP, **Ke RW**. Preimplantation genetic screening (PGS) is an excellent tool, but not a perfect: guide to counseling patients considering PGS. Fertil Steril. 2015 Oct. pii: S0015-0282(15)02006-3.

Cobb LN, **Ke RW**. Ethical considerations in the field of assisted reproductive technology. Minerva Endocrinol. 2018 Mar;43(1):80-86. http://doi: 10.23736/S0391-1977.17.02664-5.

Abdelsamad DM, **Ke RW**, Kutteh WH. Thyroid Function and Reproduction. In MK Skinner (Ed.), Encyclopedia of Reproduction. vol. 4, 77–81, 2018. Academic Press: Elsevier. http://dx.doi.org/10.1016/B978-0-12-801238-3.64521-X

Kutteh WH, Jaslow CR, Brezina PR, **Ke RW**, Bailey AP, Stephenson MD. Recurrent Pregnancy Loss: a new strategy based on genetic testing. In: Munro MG, Gomel V (Ed), *Reconstructive and Reproductive Surgery in Gynecology*, Second Ed. CRC Press, 2019

ABSTRACTS PRESENTED

Ke RW, Helewa ME: Midpelvic forceps rotation and extraction: Confirmation of safety. Society of Obstetricians and Gynecologists of Canada Annual Meeting. Toronto, Canada. June, 1991.

Ke RW, Kurtz BR, Daniell JF: Hysteroscopic endometrial ablation using the rollerball electrode. Society of Obstetricians and Gynecologists of Canada Annual Meeting. Vancouver, Canada. June, 1992.

Ke RW, Dockter ME, Majumdar G, Buster JE, Carson SA: Flow cytometry provides rapid, highly accurate detection of antisperm antibodies. American Fertility Society Annual Meeting. Montreal, Canada. October, 1993.

Ke RW, Buster JE, Carson SA: Separation of antibody sperm by magnetic cell sorting. American Fertility Society meeting, San Antonio, TX, November 7-10, 1994.

Ke RW, Buster JE, Dockter ME, Andersen R, Carson SA: A rabbit model for circulating antisperm antibody induction. Society for Gynecologic Investigation Annual Meeting, Chicago, IL, March 15-18, 1995.

Ke RW, Sommerfelt CC, Lincoln SR, Casson PR: Embryo co-culture with autologous granulosa cells in human in vitro fertilization. American Society of Reproductive Medicine Annual Meeting, Boston, MA, Nov. 2-6, 1996.

Ke RW, McKenzie AK, Umstot ES, Lincoln SR, Ahokas RA: Effects of nitric oxide synthase inhibition on ovulation in the rat. Society for Gynecologic Investigation Annual Meeting, San Diego, CA, March 19-22, 1997.

Lincoln SR, **Ke RW**, Byrd W, Kutteh WH: Screening infertile women for subclinical hypothyroidism. Society for Gynecologic Investigation Annual Meeting, San Diego, CA, March 19-22, 1997.

Ke RW, Wachtel SS, Wachtel G, Sommerfelt CC, Hill KG, Lincoln SR, Kutteh WH, Shulman LP. 10th World Congress On In Vitro Fertilization and Assisted Reproduction, Vancouver, BC, May 24-28, 1997.

Ke RW, Portera SG, Lincoln SR: A randomized, blinded trial of pre-emptive local anesthesia in laparoscopy. American College of Obstetricians & Gynecologists Annual Clinical Meeting, New Orleans, LA, May 11, 1998.

Ke RW, Lincoln SR, Kutteh WH: Influence of serum cotinine and tobacco exposure on successful in vitro fertilization and embryo transfer. Society of Gynecological Investigation Annual Meeting, Atlanta, GA, March 12-15, 1998.

Pace D, Engelhardt K, **Ke RW**, Hathaway D: Effect of hormone replacement therapy on heart rate variability. North American Menopause Society, Toronto, Canada, September 17-20, 1998.

Ke RW, Pace D, Ahokas R: Short-term hormone replacement therapy reduces oxidative stress in postmenopausal women. Society of Gynecological Investigation Annual Meeting, Atlanta, GA, March 10-12, 1999.

Ke RW, Sommerfelt C, Kutteh WH: Comparison of defined culture media for development of cleavage stage human embryos. 11th World Congress On In Vitro Fertilization and Human Reproductive Genetics. Sydney, Australia. May 9-14, 1999.

Barker L, **Ke RW**, Kutteh WH: The association of insulin resistance and pregnancy loss. American Society of Reproductive Medicine, Orlando, FL October 20-23, 2001.

Chuang A, **Ke RW**, Ghazeeri GS, Kutteh WH. An abnormal clomiphene citrate challenge test is predictive of pregnancy loss in patients undergoing in vitro fertilization. American Society of Reproductive Medicine, Orlando, FL October 20-23, 2001.

Ghazeeri GS, Kutteh WH, Bryer-Ash M, Haas D, **Ke RW**. Effect of rosiglitazone on spontaneous and clomiphene citrate-induced ovulation in women with polycystic ovary syndrome. American Society of Reproductive Medicine, Orlando, FL October 20-23, 2001.

Bagous TN, Norman L, **Ke RW**, Kutteh, WH. Association of thrombophilias in women with unexplained recurrent pregnancy loss (RPL). American Society of Reproductive Medicine, Seattle, WA October 12-17,2002.

Markle RL, King PJ, Martin DB, Kutteh WH, **Ke RW**. Characteristics of successful human chorionic gonadotropin (hCG) administration in assisted reproduction. American Society of Reproductive Medicine, Seattle, WA October 12-17,2002.

Ke RW, Pasley MA. Effect of weight loss and insulin–sensitizing agents on polycystic ovarian syndrome–associated infertility. Canadian Fertility and Andrology Society, Victoria, BC Nov 5-9, 2003.

Wells MD, Kutteh WH, **Ke RW**. Change in serum luteinizing hormone affects the outcome of in vitro fertilization. American Society of Reproductive Medicine, October 18-20, 2004. Philadelphia, PA.

Patterson K, **Ke RW**, Jacoski MV, White MM, Grant CC, Jennings LK. Expression of Cell Surface CD9 in Fertile and Infertile Women. American Society of Reproductive Medicine, October 18-20, 2004. Philadelphia, PA.

Kutteh WH, Lundquist L, **Ke RW**. Toward a single blastocyst transfer in a medium sized assisted reproductive technology program. American Society of Reproductive Medicine, October 18-20, 2004. Philadelphia, PA.

Bareddy B, **Ke RW**, Kutteh WH. Comparison of sonohysterography with hysterosonography. American Society of Reproductive Medicine, October 18-20, 2004. Philadelphia, PA.

Jaslow CR, Kutteh WH, **Ke RW**, Patterson KS, Cholera S, Jennings LK. Relationship of the CD9 protein on human granulosa cells and platelets with fertilization rates in women undergoing in vitro fertilization. American Society of Reproductive Medicine, October 23-25, 2006. New Orleans, LA.

Kutteh WH, Williams L, **Ke RW**. A prospective, randomized, single-center study comparing the use of an echogenic embryo transfer catheter to a standard embryo transfer catheter in an IVF program. American Society of Reproductive Medicine, October 23-25, 2006. New Orleans, LA.

Kutteh WH, Jaslow CR, **Ke RW**. Elevated homocysteine levels in women with recurrent pregnancy loss are associated with A1298C mutations of methylenetetrahydrofolate reductase (MTHFR) in the absence of C677T mutations. American Society of Reproductive Medicine, October 23-25, 2006. New Orleans, LA.

Jaslow CR, Carney J, Norman L, Fong S, **Ke RW**, Kutteh WH. Etiology of recurrent pregnancy loss in 1018 women. American Society of Reproductive Medicine, October 23-25, 2006. New Orleans, LA.

Smith XL, **Ke RW**, Page AM, Kutteh WH. Effect of weight and insulin-sensitization agents on polycystic ovarian syndrome (PCOS)-associated infertility. American Society of Reproductive Medicine. October 14-17, 2007. Washington DC.

Kutteh WH, **Ke RW**, Jaslow CR. Association between antiphospholipid antibodies and recurrent pregnancy loss – A syndrome actually exists! American Society of Reproductive Medicine. October 14-17, 2007. Washington DC.

Simonsen R, Murray RS, **Ke RW**, Kutteh WH. Outcomes of IVF cycles which display dysynchronous follicular growth. American Society of Reproductive Medicine. October 14-17, 2007. Washington DC.

Kutteh WH, Collins B, **Ke RW**, Williams LJ. Conceivease® fertility-friendly lubricant is superior to other commercial lubricants in preserving sperm motility and progressive motility over 72 hours. American Society of Reproductive Medicine. November 8-12, 2008. San Francisco, CA.

Sayago MM, Kutteh WH, **Ke RW**, Peters C, Ke SL. Frequency of subchorionic hematomas in patients attending a fertility clinic and a general obstetrical clinic. American Society of Reproductive Medicine. November 8-12, 2008. San Francisco, CA.

Block-Abraham D, **Ke RW**, Bloomer RL. Impact of serum estradiol on biomarkers of oxidative stress in polycystic ovarian syndrome and ovulatory women. American Society of Reproductive Medicine. October 9-12, 2010. Denver, CO.

Ke RW, Xu M, Kutteh WH. Comparison of Outcomes in Women who accepted or rejected acupuncture treatment during in vitro fertilization and embryo transfer (IVF). American Society of Reproductive Medicine. October 17-19, 2011. Orlando, FL.

Ke RW, Hertler K, Kutteh WH. Effect of the time interval between ovulation trigger and oocyte retrieval in women undergoing in vitro fertilization. American Society of Reproductive Medicine. October 17-19, 2011. Orlando, FL.

Green DM, Liu W, Kutteh WH, **Ke RW**, Shelton KC, Sklar CA, Chemaitilly W, Klosky J, Spunt SL, Metzger M, Navid F, Srivastava DK, Ness KK, Robison LL, Hudson MM. Alkylating agent exposure and sperm concentration in adult survivors of childhood cancer: A report from the St. Jude Lifetime (SJLIFE) Cohort Study. American Society of Clinical Oncology. May 3-June 4, 2014. Chicago, IL.

Ding JD, **Ke RW**, Yang Y, Kutteh WH. Transplantation of zona-free cleavage stage embryo into an empty zona with successful blastulation, a case series. American Society of Reproductive Medicine. October 13-16, 2014. Honolulu, Hawaii.

Green DM, **Ke RW**, Kutteh WH et al. Effect of cranial irradiation and alkylating agent chemotherapy on sperm concentration of survivors of childhood ALL: a report from the St.Jude Lifetime Cohort study. 48th Congress of the International Society of Paediatric Oncology, October 19-22, 2016, Dublin, Ireland.

Kutteh WH, Popescu F, **Ke RW**, Brezina PR, Bailey A, Jaslow CR. Recurrent pregnancy loss evaluation combined with 23-chromosome testing of miscarriage tissue explains the cause of pregnancy loss in over 90% of all miscarriages. European Society of Human Reproduction. July 11, 2017, Geneva Switzerland.

RESEARCH SUPPORT

AGENCY: University of Tennessee Medical Group, Inc.

PROJECT: Isolation of Antibody Free Sperm in Immunologic Infertility

FUNDING: \$12,500 (Principal Investigator)
DATES: October 1, 1992 - June 30, 1994

AGENCY: National Institutes of Health (N01-WH-3-2118)
PROJECT: Women's Health Initiative: Vanguard Center

FUNDING: \$9,742,791 (Co-Investigator)
DATES: March 30, 1993 - June 30, 2004.

AGENCY: University of Tennessee Medical Group, Inc. PROJECT: Effect of Nitric Oxide Inhibition on Ovulation

FUNDING: \$12,370 (Principal Investigator)

DATES: October 1, 1994 - September 30, 1996

AGENCY: R.W. Johnson Pharmaceutical Research Institute

PROJECT: Cyclophasic Hormone Replacement (ESTNRG-CHRT-103)

FUNDING: \$108,835 (Principal Investigator)
DATES: September 6, 1995 - April 1, 1998

AGENCY: R.W. Johnson Pharmaceutical Research Institute

PROJECT: Trandermal Contraceptive System (NRGEEP-CONT-002)

FUNDING: \$43,137 (Principal Investigator)
DATES: Oct 1, 1997 - September 30, 1998

Raymond Weehan Ke, M.D. Page 14

AGENCY: Lipha Pharmaceuticals, Inc.

Multicenter Dose-Finding Study Comparing the Efficacy of EMD 90 PROJECT:

> Estradiol-Levonorgestrel 171, Once-a-Week Combination Transdermal System (TDS), with Placebo in the Treatment of

Vasomotor Symptoms Associated with Menopause.

\$150,000 (Co-Investigator) FUNDING:

1997-1998 DATES:

Ferring Pharmaceuticals, Inc. (FPI Rep 97-01) AGENCY:

Open-Label, Group, PROJECT: Randomized, Parallel Multi-Center,

> Pharmacokinetic/Pharmacodynamic Study In Anovulatory and Oligoovulatory Infertile Female Patients Comparing Repronex S.C.

and IM with Pergonal IM for Ovulation Induction.

\$100,000 (Co-Investigator) FUNDING:

1997-1998 DATES:

AGENCY: Ferring Pharmaceuticals, Inc. (FPI Rep 97-02)

A Randomized, Open-Label, Parallel Group, Multi-Center, Efficacy PROJECT:

Study Comparing Repronex S.C., Repronex IM and Pergonal IM in

Female Patients Undergoing In-Vitro Fertilization.

\$106,000 (Co-Investigator) FUNDING:

DATES: 1997-1998

AGENCY Serono Laboratories, Inc (21008)

A phase III, prospective, randomized, controlled, double-blinded, **PROJECT**

> multicenter study to confirm the efficacy and safety of r-hLH in women with hypogonadotropic hypogonadism and severe LH

deficiency who desire pregnancy.

\$56,000 (Principal Investigator) **FUNDING**

2000-2001 **DATES**

AGENCY Serono Laboratories, Inc (21415)

A phase III, open-label, multicenter study of r-hLH in women with **PROJECT**

hypogonadotropic hypogonadism and severe LH deficiency to provide

continuation of treatment after completion of Serono study 21008

\$24,000 (Principal Investigator) **FUNDING**

2000-2002 DATES

Raymond Weehan Ke, M.D. Page 15

AGENCY Serono Laboratories, Inc (24899)

PROJECT Ovulation triggering for ART using Ovidrel Pre-filled Syringe. A

phase IV non-comparative study in patients receiving controlled

ovarian stimulation for ART.

FUNDING \$32,000 (Principal Investigator)

DATES 2003-2005

AGENCY EMD Serono (25550)

PROJECT A prospective, randomized, double-blind, multi-center, dose finding,

comparative study for the evaluation of the aromatase inhibitor Anastrozole (multiple dose) versus clomiphene citrate in stimulating follicular growth and ovulation in infertile women with ovulatory

dysfunction.

FUNDING \$64,000 (Co-Investigator)

DATES 2007-2008

AGENCY Merck (Schering-Plough) PURSUE Trial (P06029

PROJECT A Phase III, randomized, double-blind, multi-center, Active-

controlled, non-inferiority trial to investigate the safety and efficacy of a single injection of SCH 900962 (cofollitropin alfa) to induce multifollicular development for controlled ovarian stimulation using daily recombinant FSH as a reference in women aged 35 to 42 years.

FUNDING \$250,000 (Co-Investigator)

DATES 2010-2015

AGENCY Ferring Pharmascience, International, Inc

PROJECT A multicenter, double-blind, randomized, placebo-controlled study

evaluating two doses of subcutaneous pulsatile GnRH administered via OmniPod Pump for ovulation induction in female subjects with

hypogonadotropic hypogonadodism.

FUNDING \$54,000 (Principal Investigator)

DATES 2014-present

INVITED LECTURES AND VISITING PROFESSORSHIPS

Visiting Instructor in Operative Endoscopy, CMC Medical Training Center, Nashville, TN July 1992 - June 1994.

Guest Faculty for Course in Operative Laparoscopy. Ethicon Endosurgery Institute, Cincinnati, OH, November 22-24, 1992.

Invited Lecture, "Hope for the Infertile: Future Trends in Assisted Reproductive Technologies." Manitoba Medical Association, Winnipeg, Manitoba, October 19, 1993.

Grand Rounds, "Immunologic Infertility: The Mystery of Sperm Antibodies." University of Manitoba, Winnipeg, Manitoba, October 20, 1993.

Grand Rounds, "Hormone Replacement Therapy: Ever Too Late?" Department of Obstetrics and Gynecology, James H. Quillen College of Medicine, East Tennessee State University, Johnson City, TN, May 2, 1995.

Guest Faculty, Primary Care Issues in Women's Health. "Endometriosis: Facts and Fallacies." Methodist Hospitals of Memphis. September 23, 1995.

Grand Rounds, "Sperm Cryopreservation." St. Jude Children's Research Hospital, Memphis, TN. October 5, 1995.

Invited Lecture, "Hormone Replacement Therapy: Is it Ever Too Late?" East Tennessee OB/GYN Society, Knoxville, TN September 18, 1996.

Guest Faculty, Looking For The Stork. "Hopelessly Infertile: Is There Any Hope?" Jackson Madison County General Hospital, Jackson, TN January 18,1997.

Grand Rounds, "Hopelessly Infertile: Is There Any Hope?" Dalhousie University, Halifax, NS, Canada. February 12,1997.

Grand Rounds, "Managing Compliance with Hormone Replacement Therapy." Jackson-Madison County General Hospital, Jackson, TN, June 2, 1998.

Guest Faculty, "Fertility and Pregnancy Outcomes," St. Jude Children's Research Hospital Survivor Conference, Memphis, TN. June 6, 1998.

Invited Lecture, "Hormone Replacement Therapy: Facts and Fallacies." Norfleet Forum For The Advancement of Health. University of Tennessee, Memphis. October 28, 1998.

Grand Rounds, "Hormone Replacement Therapy: Can We Do Better?" University of Arkansas Medical Center, Little Rock, AR. November 8, 2000.

Grand Rounds, "Perimenopause: The Real Change." University of Mississippi, Jackson, MS. January 17, 2001

Invited Lecture, "Heart of a Woman: Hormone Replacement Therapy" Mississippi Pharmacists Association Annual Meeting, Destin FL. June 19, 2001.

Grand Rounds, "Heart of a Woman: Hormone Replacement Therapy" University of Tennessee, Knoxville, TN. March 16, 2002.

Grand Rounds, "New Challenges in Polycystic Ovarian Syndrome", University of Texas Health Center, Tyler, TX. April 11, 2003

Guest Faculty, "Cancer Treatment and Future Fertility". St. Jude Children's Research Hospital Survivor Conference, Memphis, TN. June 14, 2003.

Invited Lecture, "Heart of a Woman: Hormone Replacement Therapy", Annual Meeting, Tennessee Section, American College of Obstetrics and Gynecology, Nashville, TN, September 13, 2003.

Invited Lecture, "Hormone Therapy: Is there life after the Women's Health Initiative", Annual Meeting, District VII, American College of Obstetrics and Gynecology, Washington, DC., October 9-11, 2004.

Invited Lecture, Insulin Sensitization for Polycystic Ovary Syndrome. Symposium, Annual Meeting, American Society of Reproductive Medicine, October 18-20, 2004. Philadelphia, PA.

Grand Rounds, "New Challenges in Polycystic Ovary Syndrome". East Tennessee State University, Johnson City, TN. April 14, 2005.

Grand Rounds, "Hormone Therapy: Is there life after the Women's Health Initiative", Dalhousie University, Halifax, Canada September 23, 2006.

Grand Rounds, "Fertility After Cancer Treatment". University of Tennessee, Knoxville. Department of Oncology, Knoxville, TN. May 16, 2007

Grand Rounds, "Fertility Preservation After Cancer". Vanderbilt University, Department of Oncology, Nashville, TN. January 30, 2008

Invited Lecture, "New Challenges in Polycystic Ovary Syndrome?", Grand Rounds, Baptist Memorial Hospital for Women, Memphis, TN. July 21, 2009.

Invited Lecture, "Hopelessly Infertile: Are There Any Miracles?" Twelfth Annual Women's Health, Newborn and Children's Conference, North Mississippi Medical Center, Tupelo, MS. April 20, 2010

Grand Rounds, "Fertility Preservation After Cancer". University of Vermont, Department of Obstetrics and Gynecology, Burlington, VT. February 24, 2011

Invited Lecture, "Fertility After Cancer Treatment", 2012 Baptist Memorial Hospital Breast Cancer Conference, Memphis, TN. September 21, 2012.

Invited Lecture, "New Challenges in Polycystic Ovary Syndrome", 2013 Baptist Memorial Hospital Emerging Trends In Diabetes Conference, May 17, 2013.

Invited Lecture, "Fertility After Cancer Treatment", 4th National Reproductive Health Conference, Peking University Shenzhen Hospital, Shenzhen, China, June 5-7, 2015.

Grand Rounds, "New Challenges in Polycystic Ovary Syndrome?", Vanderbilt University, Nashville, TN. Feb 5, 2016.

Invited Lecture, "Fertility After Cancer Treatment in Adolescent and Young Adult Females", Dept of Radiation Oncology, St Jude Children's Research Hospital, Memphis, TN. July 17, 2018.