

PUBLICATIONS & PRESENTATIONS

Reproductive Endocrinology and Infertility
Department of Obstetrics and Gynecology
Duke University School of Medicine

Fellow Presentations in the Past Five Years (Fellows are noted in **Bold**):

Couchman GM, Walmer DK, McLachlan J, Nelson,KG: Identification and Characterization of Human Endometrial Protein Tyrosine Kinases: Expression of lyn, a Src-family tyrosine kinase. Keystone Symposia: Oncogenes 20 years later, Jan 1995

Barnett BD, Bachus KE, **Couchman GM**, Haney AF, Walmer DK. Women with mild endometriosis who have failed controlled ovarian hyperstimulation have IVF pregnancy rates equivalent to or superior to that of tubal factor patients. 51st Annual Meeting of the American Society for Reproductive Medicine, Seattle, October, 1995, Abstract O-117, S57

Couchman GM, Bentley R, Tsao M-S, Raszmann, McLachlan JA, Walmer DK: Lyn, a Src-related tyrosine kinase, is dysregulated in leiomyomata of the human uterus. 51st Annual Meeting of the American Society of Reproductive Medicine, Seattle, October 1995, Abstract O-73, S36

Hansard L, Gardner B, Ehrmann M, Bentley R, McLachlan JA, Drapkin A, Walmer DK: Expression of cytoplasmic and extracellular transforming growth factor(antigens in human endometrium during the menstrual cycle correlates with physiologic markers. Accepted for presentation at the 51st Annual Meeting of the American Society of Reproductive Medicine, Seattle, October 1995, Abstract O-138, S68

Parsey KS, Bastian LA, **Couchman GM**. Designing a Primary Care Curriculum for OB/GYN Residents: Results of a Needs Assessment. Cultural Competence and Women's Health Curricula in Medical Education, October, 1995.

Bush MR, Walmer DK, Bachus KE, Haney AF, Bossert NL, Couchman GM: The number of motile sperm after swim-up predicts fertilization outcome in IVF cycles. Award for Best Scientific Paper in Reproductive Endocrinology at the 35th Annual Clinical Meeting of Armed Forces District of the American College of Obstetricians and Gynecologists, Nashville, 1996

Bush MR, Walmer DK, Couchman GM, Haney AF: The postcoital test does not correlate with fecundity in cycles utilizing gonadotropin-induced superovulation. Presented at the 35th Annual Clinical Meeting of Armed Forces District of the American College of Obstetricians and Gynecologists, Nashville, 1996

Osborn BH, Barnett BD, Walmer DK, Bentley RC, Plaehn EG, Couchman GM: The expression of Yes, a Src-family tyrosine kinase is altered in leiomyomas and associated myometrium. Presented at the 52nd Annual Meeting of the American Society for Reproductive Medicine, Boston, November 1996, Abstract O-006, S4

Schutzer DA, Walmer DK, **Couchman GM.** Outcomes before and after transabdominal myomectomy in African-American and Caucasian Women. Presented at Resident's Day, Department of Obstetrics and Gynecology, Duke University Medical Center, June, 1996.

Bush MR, Mele JM, Couchman GM, Walmer DK. The absence of detectable transforming growth factor alpha in uterine luminal fluid is consistent with a juxtacrine mode of signaling in normal cycling human endometrium. Society for Gynecologic Investigation, Atlanta, Ga. 1998.

Osborn BH, Haney AF, Misukonis MA, Weinberg JB. Increased nitric oxide (NO) production and inducible NO synthase (iNOS) in peritoneal macrophages from women with endometriosis. Accepted for presentation at the Society for Gynecologic Investigation meeting, March 24, 2000, Chicago, IL

Redefining the relationship between sperm DNA fragmentation as measured by the sperm chromatin structure assay and outcomes of assisted reproductive techniques, **John F. Payne,** Douglas Raburn, Grace M. Couchman, Thomas M. Price, Margaret Jamison, David K. Walmer (Abstract #550) Oral Presentation at Male Factor: ART Abstract Session, Program#: O-115, Date: 10/18/2004, Presentation Time: 5:00 PM)

Characterization of a novel, non-genomic truncated progesterone receptor, **Karen Lee,** Thomas M. Price (Abstract #406) Oral Presentation at SREI Fellow Research Abstract Session, Program#: O-8, Date: 10/18/2004, Presentation Time: 10:45AM)

I. Publications from the RE&F Division within the Past Three Years (included are the peer-reviewed publications by clinical RE&I faculty, not the adjunctive faculty except Dr. Weinberg, in whose laboratory a current fellow is working):

Bastian LA, **Couchman GM,** Nanda K, Siegler IC. Hormone Replacement Therapy: Benefits, Risks and Management. Clin Atlas Office Proced . 1998;1:79-87.

Katz DF, Henderson MH, Owen DH, Plenys AM, **Walmer DK:**What is needed to advance vaginal formulation technology In: Vaginal Microbicide Formulations Workshop, William F. Rencher (Ed.). Philadelphia, Lippincott-Raven Publishers. 1988, pp. 90-99. ISBN 0-781-71932-1.

Bush MR, Mele JM, **Couchman GM,** Walmer DK. Evidence of Juxtacrine Signaling for Transforming Growth Factor alpha in human Endometrium. Biol Reprod 1998;59: 1522-1529.

Weinberg JB, Nitric oxide production and nitric oxide synthase type 2 expression by human mononuclear phagocytes: A review. *Mol Med* 1998;4:557-91.

Imseis HM, Mutha AP, Alexander KA, **Barnett BD**. Spontaneous rupture of a primigravid uterus secondary to placenta percreta. A case report. *J Reprod Med* 1998;43:233-6.

Haney AF, Doty E. A barrier composed of chemically cross-linked hyaluronic acid (Incert) reduces postoperative adhesion formation. *Fertil Steril* 1998;70:145-51.

Weinberg JB, Shugars DC, Sherman PA, Sauls DL, Fyfe JA. Cobalamin inhibition of HIV-1 integrase and integration of HIV-1 DNA into cellular DNA. *Biochem Biophys Res Commun* 1998; 246: 393-7.

Effect of progestin on the ovarian epithelium of macaques: cancer prevention through apoptosis. Rodriguez GC, **Walmer DK**, Cline M, Krigman H, Lessey BA, Whitaker RS, Dodge R, Hughes CL. *Journal of the Society For Gynecologic Investigation*. 1998;5:271-6.

Schiff I, Rebar, RW, Cramer JA, Gerbino P, **Hammond CB**, et al: Achieving long-term Continuation of menopausal ERT/HRT: Consensus opinion of the North American Menopause Society. *J N Am Menopause Soc* 1998;5:69-76.

Perkins DJ, St. Clair EW, Misukonis MA, **Weinberg JB**. Reduction of NOS2 overexpression in rheumatoid arthritis patients treated with anti-tumor necrosis factor alpha monoclonal antibody (cA2). *Arthritis Rheum* 1998;41:2205-10.

Weinberg JB, Cobalamin inhibition of HIV-1 integrase and integration of HIV-1 DNA into cellular DNA. *Biochem Biophys Res Commun* 1998;246:393-7.

Parsey K, Bastian LA, **Couchman GM**, Slack K, Simel DL. The Development of a Primary Care Curriculum for Obstetrics and Gynecology Residents. *J Am Med Women's Assoc* 1998;53:137-9.

Tansey G, Hughes CL Jr, Cline JM, Krummer A, **Walmer DK**, Schmoltzer S. Effects of dietary soybean estrogens on the reproductive tract in female mice. *Proc Soc Exp Biol Med* 1998;217:340-4.

Weinberg JB, Nitrosylation of blood hemoglobin and renal nonheme proteins in autoimmune MRL-lpr/lpr mice. *Free Radic Biol Med* 1998;24:191-6.

Haney AF: Endometriosis-Associated Infertility. *Reproductive Medicine Review* 6:145-161, 1998.

Haney AF, Doty E. The temporal efficacy of early second-look lysis of adhesions in reducing postoperative adhesions in a murine model. *Am J Obstet Gynecol* 1998;179:368-73.

Shami PJ, Sauls DL, **Weinberg JB**. Schedule and concentration-dependent induction of apoptosis in leukemia cells by nitric oxide. *Leukemia* 1998;12:1461-6.

Bissonnette JM, Gabbe SG, **Hammond CB**, MacDonald PC, Polan ML, Roberts JM: Restructuring residency training in obstetrics and gynecology. *Am J Obstet Gynecol* 1999;180:3-5.

Anstey NM, **Weinberg JB**, Wang Z, Mwaikambo ED, Duffy PE, Granger DL. Effects of age and parasitemia on nitric oxide production/leukocyte nitric oxide synthase type 2 expression in asymptomatic, malaria-exposed children. *Am J Trop Med Hyg* 1999;61:253-8.

Cunha GR, Forsberg JG, Golden R, **Haney AF**, Iguchi T, Newbold, RR, Swan S, Welshons W: New approaches for estimating risk from exposure to diethylstilbestrol. *Environ Health Perspect* 1999;107:625-30.

Anstey NM, Granger DL, Hassanali MY, Mwaikambo ED, Duffy PE, **Weinberg JB**. Nitric oxide, malaria, and anemia: Inverse relationship between nitric oxide production and hemoglobin concentration in asymptomatic, malaria-exposed children. *Am J Trop Med Hyg* 1999;61:249-52.

Hammond CB: A new look at menopausal hormone replacement: evidence-based observations. *J Brit Menopause Soc*, 1999;5 :4-6.

Perkins DJ, Kremsner PG, Schmid D, Misukonis MA, Kelly MA, **Weinberg JB**. Blood mononuclear cell nitric oxide production and plasma cytokine levels in healthy Gabonese children with prior mild or severe malaria. *Infect Immun* 1999;67:4977-81.

Haney AF. Identification of macrophages at the site of peritoneal injury: Evidence supporting a direct role for peritoneal macrophages in healing injured peritoneum. In press, *Fertil Steril*, May, 2000.

Levesque MC, Ward FE, Jeffery DR, **Weinberg JB**. Interferon-beta1A-induced polyarthritis in a patient with the HAL-DRB1*0404 allele. *Arthritis Rheum* 1999;42:569-73.

Osborn BH, Couchman GM, Siegler IC, Bastian LA. Osteoporosis risk factors: Association with use of hormone replacement therapy and worry about osteoporosis. *Women Health Issue* 1999;9:278-85.

Granger DL, Anstey NM, Miller WC, **Weinberg JB**. Measuring nitric oxide production in human clinical studies. *Methods Enzymol* 1999;301:49-61.

Haney AF. Clinical decision making regarding uterine fibroids: What we need in the next millennium. In press, *Environ Health Perspect*, June, 2000.

Barnett BD, Walmer DK, Plaehn EG, **Osborn BH**, **Couchman GM**. Lyn and c-yes src-family protein tyrosine kinase signaling in human leiomyoma and myometrium. *J Soc Gynecol Invest* (In press).

Relationships of PFOS/PFOA concentrations in Human Male Plasma and Semen to Semen Quality and Hormonal Status. J. H. Raymer, **D. Walmer**, M. Gardner, C. Sloan, T. Wilcosky, Y. Hu, P. Fail, T. Marrero, and M. Rice. RTI International, RTP, NC and Duke University Medical Center, Durham, NC. (submitted to International Society of Exposure Analysis May 2004)

Portable colposcopy in low-resource settings, **David K. Walmer**, Delson Merisier, Eva Littman, Gustavo Rodriguez, Nick Venero, Marcus Henderson, David Katz, Rosemary Edwards. *Journal of Acquired Immunodeficiency Syndrome* 35(2): ???-???,2004.

Publications in the Past Five Years with a Fellow as a Co-Author (Only the Peer-reviewed publications are included and the Fellow is noted in Bold):

Levy JR, **Faber KA**, Ayyash L, Hughes CL Jr: The effect of prenatal exposure to the phytoestrogen genistein on sexual differentiation in rats. *Proc Soc Exp Biol Med* 1995;208:60-6.

Register R, Bethel MA, Thompson N, **Blohm P**, Ayyash L, Walmer D and Hughes C. The effect of neonatal exposure to diethylstilbestrol, coumestrol, and beta-sitosterol on pituitary responsiveness and sexually dimorphic nucleus volume in the castrated adult rat. *Proc Soc Exp Biol Med* 1995;208:72-7.

Bidwell MC, Eitzman BA, Walmer DK, McLachlan JA, Gray KD. Characterization of the platelet-derived growth factor signaling pathway in the placenta, extraembryonic membranes, and uterus during the latter half of murine gestation: Potential interface with fundamental processes during development. *Endocrinol* 1995;136:5189-201.

Bachus KE, Doty E, Haney AF, Weinberg JB. Differential effects of Interleukin-1(, tumor necrosis factor, indomethacin, hydrocortisone, and macrophage co-culture on the proliferation of human fibroblasts and peritoneal mesothelial cells. *J Soc Gynecol Invest* 1995;2:363-42.

Couchman GM, Bentley R, Tsao M-S, Raszmann K, McLachlan JA, Walmer DK.

p53kyn and p56lyn: A new signaling pathway in human endometrium and endometrial adenocarcinomas. *J Soc Gynecol Invest* 1997;4:103-9.

Hansard LJ, Healy-Gardner BE, Drapkin AT, Bentley RC, McLachlan JA, Walmer DK. Human endometrial transforming growth factor- α : A transmembrane, surface epithelial protein that transiently disappears during the midsecretory phase of the menstrual cycle. *J Soc Gynecol Invest* 1997;4:160-6.

Bush MR, Walmer DK, Couchman GM, Haney AF: Evaluation of the postcoital test in cycles involving exogenous gonadotropins. *Obstet Gynecol* 1997;89:1-5.

Imseis HM, Mutha AP, Alexander KA, **Barnett BD**. Spontaneous rupture of a primigravid uterus secondary to placenta percreta. A case report. *J Reprod Med* 1998;43:233-6.

Bush MR, Mele JM, Couchman GM, Walmer DK: Evidence of justacrine signaling for transforming growth factor α in human endometrium. *Biol Reprod* 1998;59:1522-9.

Osborn BH, Couchman GM, Siegler IC, Bastian LA. Osteoporosis risk factors: Association with use of hormone replacement therapy and worry about osteoporosis. *Women Health Issue* 1999;9:278-85.

Richards RG, Klotz DM, **Bush MR**, Walmer DK, DiAugustine RP. E2-induced degradation of uterine insulin receptor substrate-2: requirement for an IGF-I-stimulated, proteasome-dependent pathway. [Journal Article] *Endocrinology*. 142(9):3842-9, 2001 Sep.

The relationship between pre-embryo pronuclear morphology (Zygote score) and cleavage-stage embryo morphology on assisted reproductive technique outcomes, **John F. Payne**, Douglas Raburn, Grace M. Couchman, Thomas M. Price, Margaret Jamison, David K. Walmer (Abstract #900),
Poster#: P-249, Session Title: Outcome Predictors-Laboratory: ART)

Redefining the relationship between sperm DNA fragmentation as measured by the sperm chromatin structure assay and outcomes of assisted reproductive techniques, **John F. Payne**, Douglas Raburn, Grace M. Couchman, Thomas M. Price, Margaret Jamison, David K. Walmer (Abstract #550) Oral Presentation at Male Factor: ART Abstract Session, Program#: O-115, Date: 10/18/2004, Presentation Time: 5:00 PM)

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Successful pregnancies in patients with estrogenic ovulatory dysfunction after low dose hCG therapy alone following hMG for controlled ovarian hyperstimulation.

Karen L. Lee, Grace M. Couchman, David K. Walmer. Journal of Assisted Reproduction and Genetics (accepted 2004, publication pending)

Evidence supporting cell-specific phosphodiesterase ovarian follicle: Granulosa/luteal cell progesterone inhibition of PDE4D rather than PDE3 activity, David W. Schomberg, Ioanna Konidari, **Jon A. Proctor**, Justin E. Eller, Grace M. Couchman, David K. Walmer (submitted to Fertility & Sterility August 2004)