

DAVID KEITH WALMER, MD, PhD
CURRICULUM VITAE
January 24, 2017

Current Position

Atlantic Reproductive Medicine Specialists, PA 08/2012-present

Positions in Duke University Health System

Faculty

Associate Clinical Professor, Ob/Gyn, Pathology & DGHI 07/1987-08/2012

Duke Division of Reproductive Endocrinology

Chief, Division of Reproductive Endocrinology and Fertility 09/2003-08/2012

Fellowship Director, Reproductive Endocrinology and Infertility 07/2000-03/2007

Laboratory Director, IVF / Andrology 05/1996-09/2005

Medical Director, In Vitro Fertilization Program 05/1990-08/2012

Duke Global Health

Member, International Partnership Committee 04/2013-

Member, Executive Committee, Duke Global Health Institute 07/2009-

Member, Clinical Departments Global Health Committee 07/2010-08/2012

Faculty, Duke Engage Program 09/2008-09/2013

Affiliate, Duke Global Health Institute 02/2008-05/2010

Member, Duke Global Health Institute 05/2010-07/2011

Faculty, Duke Global Health Institute 08/2012-present

Adjunct Faculty, Duke Global Health Institute 07/2011-08-2012

Member, Duke Global Health Residency Panel 01/2008-

Member, Duke Global Health PLUS Steering Committee 09/2007-

Member, Duke International Center for Women's Reproductive Health 05/2007-

Service Committee, Global Health Institute, Duke University 06/2006-

Faculty, Hubert-Yeargan Center for Global Health 07/2005-present

Member, Duke Global Health Service Delivery Committee 07/2005-12/2005

Other

Vice Chairman, IRB #5 05/2000-12/2001

Ob/Gyn IRB representative, DUMC 07/1990-05/2000

Positions outside of Duke University

Guest Researcher, Laboratory of Reproductive and Developmental Toxicology

National Institute of Environmental Health Sciences 07/1989-06/1995

International Health Organizations / Nonprofit Organizations:

Founder / Chairman, DHHS-approved Haitian [IRB 6585](#)/[FWA 13290](#),
IRB Misyon Sante Fanmi Ayisyen 06/2008

Founder / Chairman, Misyon Sante Fanmi Ayisyen, Leogane, Haiti 04/2008

Advisory Board Member, ImaGyn, Durham, NC	06/2007-06/2008
Board Member, Haiti Fund, Inc., Rocky Mount, NC	01/2001-07/2003
Board Member, Partners in Progress, Inc., Pittsburgh, PA	07/2001-07/2003
Board Member, The Haiti Connection, Inc., Raleigh, NC	01/2001-07/2003
Founder / Chairman, Family Health Ministries, Inc., Chapel Hill, NC	07/2000-present
Board Member, Haiti Outreach Ministries, Inc., Richmond, VA	08/1998-07/2003

Education:

Fellowship	Duke University	1987-89	Reproductive Endocrinology
Residency	Administrative Chief	1986-87	Obstetrics & Gynecology
	UT San Antonio	1983-87	Obstetrics & Gynecology
Professional	UNC Chapel Hill	1979-83	MD
Graduate	UNC Chapel Hill	1974-79	PhD Biochemistry
	Studies in Extrarenal Erythropoiesis: Biochemical Characteristics of a Sialoerythropoietic Factor Discovered in Adult Male Mice, Walmer DK. PhD Dissertation, 8/79		
Undergraduate	UNC Chapel Hill	1970-74	BA Chemistry

Board Certifications:

Reproductive Endocrinology & Infertility	1992-present
Obstetrics & Gynecology	1990-present

Refereed Publications

Global Health

1. Walmer DK, Merisier D, Littman E, Rodriguez G, Venero N, Henderson M, Katz D, Edwards R. Portable colposcopy in low-resource settings. *Journal of Acquired Immune Deficiency Syndromes* 37(3):S167-170, 2004.
2. Henderson MH, Peters JJ, Walmer DK, Couchman GM, and Katz DF. Optical instrument for measurement of vaginal coating thickness by drug delivery formulations. *Rev Sci Instr* 2005; 76(3): p. 1-7 of Art. No. 034302.
3. Henderson MH, Couchman BC, Walmer DK, Peters JJ, Owen DH, Brown MA, Lavine ML, Katz DF, Optical imaging and analysis of human vaginal coating by drug delivery gels. *Contraception* 75:142-151, 2007
4. Obure J, Olala O, Swai B, Mlay P, Masenga G, Walmer D. Prevalence and severity of cervical squamous intraepithelial lesion in a tertiary hospital in Northern Tanzania. *Tanzania Journal of Health Research* 11(4):163-9, 2009 Oct.
5. Lai BE, Henderson MH, Peters JJ, Walmer DK, Katz DF. Transport theory for HIV diffusion through in vivo distributions of topical microbicide gels. *Biophysical Journal*. 97(9):2379-87, 2009 Nov 4.
6. Yang HP, Walmer DK, Merisier D, Gage JC, Bell L, Rangwala S, Shrestha N, Kobayashi L, Eder PS, Castle PE. A pilot analytic study of a research-level, lower-cost human papillomavirus 16, 18, and 45 test. *Journal of Virological Methods*. 176(1-2):112-4, 2011 May.

7. Chang V T-C, Merisier D, Yu B, Walmer DK, Ramanujam N. Towards a field-compatible optical spectroscopic device for cervical cancer screening in resource-limited settings: effects of calibration and pressure. *Optics Express* September 2011; 19(19): 17908-24
8. Peragallo Urrutia R, Merisier D, Small M, Urrutia E, Tinfo N, Walmer DK. Unmet health needs identified by Haitian women as priorities for attention: a qualitative study. *Reprod Health Matters*. 2012 Jun;20(39):93-103.
9. Walmer DK, Eder PS, Bell L, Salim H, Kobayashi L, Ndirangu J, Tinfo N, Castle PE. Human Papillomavirus Prevalence in a Population of Women Living in Port-au-Prince and Leogane, Haiti. *PLoS One*. 2013 Oct 3;8(10):e76110. doi: 10.1371/journal.pone.0076110. eCollection 2013.
10. Kligerman M, Barry M, Walmer D, Bendavid E. International aid and natural disasters: a pre- and post-earthquake longitudinal study of the healthcare infrastructure in Leogane, Haiti. *Am J Trop Med Hyg*. 2015 Feb;92(2):448-53. doi: 10.4269/ajtmh.14-0379. Epub 2014 Dec 15.
11. Boggan JC, Walmer DK, Henderson G, Chakhtoura N, McCarthy SH, Beauvais HJ, Smith JS. Vaginal Self-Sampling for Human Papillomavirus Infection as a Primary Cervical Cancer Screening Tool in a Haitian Population. *Sex Transm Dis*. 2015 Nov;42(11):655-9. doi: 10.1097/OLQ.0000000000000345.
12. Kligerman M, Walmer D, Bereknay Merrell S. The socioeconomic impact of international aid: a qualitative study of healthcare recovery in post-earthquake Haiti and implications for future disaster relief. *Glob Public Health*. 2015 Nov 13:1-14. PMID: 26565063 DOI: 10.1080/17441692.2015.1094111

Clinical Ob Gyn / Reproductive Endocrinology

1. Enterococci in Post-Cesarean Endometritis, Walmer DK, Walmer KAR, Gibbs RS. *Obstetrics and Gynecology* 71:159, 1988.
2. Ovarian Hyperstimulation in Polycystic Ovary Syndrome During Therapy with Leuprolide Acetate, Walmer DK, Haney AF, Dodson WC. *Fertility and Sterility* 52: 858-863, 1989.
3. Utility of Fluoroimmunoassay in Detecting Luteinizing Hormone Surges in Spontaneous and Human Menopausal Gonadotropin-Stimulated Menstrual Cycles. Hughes CL, Dodson WC, Walmer DK, Dixon S. *Journal of Reproductive Medicine* 35: 211, 1990.
4. Epidermal growth factor replaces estrogen in the stimulation of the female genital-tract growth and differentiation. Nelson KG, Takahashi T, Bossert NL, Walmer DK, McLachlan JA. *Proceedings of the National Academy of Science USA* 88:21-25,1991.
5. Adjunctive Leuprolide Therapy Does Not Improve Cycle Fecundity in Controlled Ovarian Hyperstimulation and Intrauterine Insemination of Subfertile Women. Dodson WC, Walmer DK, Hughes, Jr. CL, Yancy SE, Haney AF. *Obstetrics and Gynecology* 78:187-90, 1991.
6. Human Granulosa-Luteal and Cumulus Cells express Transforming Growth Factors-Beta Type 1 and Type 2 mRNA. Mulheron GW, Bossert NL, Lapp JA, Walmer DK, Schomberg DW. *Journal of Clinical Endocrinology and Metabolism* 74(2):458-460,1992.
7. Lactoferrin Expression in the Mouse Reproductive Tract during the Natural Estrous Cycle: Correlation with Circulating Estradiol and Progesterone. Walmer DK, Wrona MA, Hughes CL, Nelson KG. *Endocrinology* 131(3):1458-1466,1992.
8. Differential Molecular Mechanism of the Estrogen Action That Regulates lactoferrin gene in human and mouse. Teng CT, Liu Y, Yang N, Walmer DK, Panella T. *Molecular Endocrinology* 6(11):1969-1981,1992.

9. Transforming growth factor beta_{1,2,3} mRNA and protein expression in mouse uterus and vagina during estrogen-induced growth: A comparison to other estrogen-related genes. Takahashi T, Eitzman B, Bossert N, Walmer D, Sparrow S, Flanders K, McLachlan J, Nelson K. *Cell Growth and Differentiation* 5(9):919-935,1994.
10. The effect of neonatal exposure to diethylstilbesterol, coumestrol, and beta-sitosterol on pituitary responsiveness and sexually dimorphic nucleus volume in the castrated adult rat. Register R, Bethel MA, Thompson N, Blohm P, Ayyash L, Walmer D and Hughes C. *Proceedings of the Society for Experimental Biology and Medicine* 208(1):72-77,1995.
11. Malignant Transformation of the Human Endometrium Is Associated with Overexpression of Lactoferrin Messenger RNA and Protein. Walmer DK, Padin CJ, Wrona MA, Healy BE, Bentley RC, Tsao M-S, Kohler MF, McLachlan JA, Gray KD. *Cancer Research* 55(5):1168-1175, 1995.
12. Analysis of Messenger Ribonucleic Acid and Protein for the Ligands and Receptors of the Platelet-Derived Growth Factor Signaling Pathway in the Placenta, Extraembryonic Membranes, and Uterus during the Latter Half of Murine Gestation. Bidwell MC, Eitzman BA, Walmer DK, McLachlan JA, Gray KD. *Endocrinology* 136(11):5189-5201, 1995.
13. Potentiation of diethylstilbestrol-induced alterations in the female mouse reproductive tract by transforming growth factor-alpha transgene expression.. Gray K. Bullock B. Dickson R. Raszmann K. Walmer D. McLachlan J. Merlino G., *Molecular Carcinogenesis*. 17(3):163-73, 1996.
14. Advanced maternal age and perinatal outcome: oocyte recipiency versus natural conception. Wolff KM, McMahan MJ, Kuller JA, Walmer DK, Meyer WR, *Obstetrics and Gynecology* 89:519-523,1997.
15. p53lyn and p56lyn: A New Signaling Pathway in Human Endometrium and Endometrial Adenocarcinomas, Couchman GM, Bentley R, Tsao M-S, Raszmann K, McLachlan JA, Walmer DK. *Journal of the Society for Gynecologic Investigation* 4(2):103-109,1997.
16. Evaluation of the Postcoital Test in Cycles Involving Exogenous Gonadotropins. Bush MR, Walmer DK, Couchman GM, Haney AF. *Obstetrics and Gynecology* 89(5):780-784,1997.
17. Human Endometrial Transforming Growth Factor- α : A Transmembrane, Surface Epithelial Protein That Transiently Disappears During the Midsecretory Phase of the Menstrual Cycle. Hansard LJ, Healy-Gardner BE, Drapkin AT, Bentley RC, McLachlan JA, Walmer DK. *Journal of the Society for Gynecologic Investigation* 4(3):160-166,1997.
18. Toxicity of Methoxy Acetic Acid in Cultured Human Luteal Cells. Almekindaer JL, Lennard DE, Walmer DK, Davis BJ, *Toxicology and Applied Pharmacology* 38:191-194,1997.
19. Effects of Dietary Soybean Estrogens of the Reproductive Tract in Female Rats. Tansey G, Hughes CL Jr., Cline M, Krummer A, Walmer DK, Schmetzer S. *Proc. Soc. Exp. Biol. Med.* 217:340-4,1998.
20. 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*. 5(5):271-6, 1998
21. Evidence of juxtacrine signaling for transforming growth factor alpha in human endometrium. Bush RM, Mele JM, Couchman GM, Walmer DK. *Biology of Reproduction* 59:1522-9,1998.
22. Subcutaneously administered Repronex in female patients undergoing in vitro fertilization is as effective and well tolerated as intramuscular menotropin treatment. Gocial B, Keye WR, Fein SH, Nardi RV, IVF Study Group. *Fertility and Sterility* 74(1):73-79,2000.

23. Advances in uterine leiomyoma research: conference overview, summary, and future research recommendations. Newbold RR. DiAugustine RP. Risinger JI. Everitt JI. Walmer DK. Parrott EC. Dixon D. *Environmental Health Perspectives*. 108 Suppl 5:769-73, 2000 Oct.
24. E2-induced degradation of uterine insulin receptor substrate-2: requirement for an IGF-I-stimulated, proteasome-dependent pathway. Richards RG. Klotz DM. Bush MR. Walmer DK. DiAugustine RP. *Endocrinology*. 142(9):3842-9, 2001 Sep.
25. Lactoferrin gene expression is estrogen responsive in human and rhesus monkey endometrium. CT Teng, W Gladwell, C Beard, D Walmer, CS Teng, B Brenner. *Molecular Human Reproduction* 8(1):58-67, 2002.
26. Rodriguez GC. Nagarsheth NP. Lee KL. Bentley RC. Walmer DK. Cline M. Whitaker RS. Isner P. Berchuck A. Dodge RK. Hughes CL. Progesterin-induced apoptosis in the Macaque ovarian epithelium: differential regulation of transforming growth factor-beta. *Journal of the National Cancer Institute*. 94(1):50-60, 2002.
27. Insulin-like growth factor-1 regulates VEGF expression in primary human uterine epithelial cells. Larsen FW, DiAugustine R, Walmer DK, Klotz DM. *Fertility & Sterility* 80:269-270, 2003.
28. Lee KL. Couchman GM. Walmer DK. Successful pregnancies in patients with estrogenic anovulation after low-dose human chorionic gonadotropin therapy alone following hMG for controlled ovarian hyperstimulation. *Journal of Assisted Reproduction & Genetics*. 22(1):37-40, 2005 Jan.
29. Behera M, Couchman G, Walmer D, Price TM. Mullerian Agenesis and Thrombocytopenia Absent Radius Syndrome: A Case Report and Review of Syndromes Associated with Mullerian Agenesis. *Obstet Gynecol Surv*. 60(7):453-61, 2005.
30. Payne JF, Raburn D, Couchman GM, Price TM, Jamison M, Walmer DK. Redefining the relationship between sperm DNA fragmentation as measured by the sperm chromatin structure assay (SCSA®) and outcomes of assisted reproductive techniques (ART). *Fertility & Sterility* 84(2):356-64, 2005.
31. Payne JF. Raburn DJ. Couchman GM. Price TM. Jamison MG. Walmer DK. Relationship between pre-embryo pronuclear morphology (zygote score) and standard day 2 or 3 embryo morphology with regard to assisted reproductive technique outcomes. *Fertility & Sterility* 84(4):900-9, 2005 Oct.
32. Garde RV, Jovanovic V, Couchman GM, Walmer DK, Price TM. Ectopic Pregnancy in a Pre-Existing Hydrosalpinx During a Spontaneous Pregnancy. *Fertil Steril Fertility & Sterility*. 86(4):1001.e11-3, 2006 Oct.
33. Lysterly AD, Steinhauer K, Namey E, Tulsy J, Cook-Deegan R, Sugarman J, Walmer D, Faden R, Wallach E. Factors that affect infertility patients decisions about the disposition of frozen embryos. *Fertil Steril* 85(6):1623-1630, 2006
34. Behera MA, Price TM, Walmer DK. Estrogenic ovulatory dysfunction or functional female hyperandrogenism: an argument to discard the term polycystic ovary syndrome. *Fertil Steril* 86(5):1292-5 2006.
35. Lacy J, Correll GR, Walmer DK, Price TM. Simple vaginal mold for use in the postoperative care of patients with a transverse vaginal septum. *Fertility & Sterility* 87(5):1225-6, 2007
36. Shah AA, Grotgut CA, Likes CE, Miller MJ, Walmer DK, Heterotopic cervical pregnancy treated with transvaginal ultrasound-guided aspiration resulting in cervical site varices within the myometrium. *Fertility & Sterility*. 91(3):934.e19-22, 2009 Mar.
37. Lysterly AD, Steinhauer K, Voils C, Namey E, Alexander C, Bankowski B, Cook-Deegan R, Dodson WC, Gates E, Jungheim ES, McGovern PG, Myers ER, Osborn B, Schlaff W,

- Sugarman J, Tulskey JA, Walmer D, Faden RR, Wallach E. Fertility patients' views about frozen embryo disposition: Results of a multi-institutional U.S. survey. *Fertil Steril* 93(2):499-509, 2010 Feb.
38. Anish A Shah, David K Walmer. A feasibility study to evaluate pelvic peritoneal anatomy with a saline intraperitoneal sonogram (SIPS). *Fertility & Sterility* 94(7):2766-8, 2010.
 39. Alicia B Moore, Linda Yu, Carol D Swartz, Xaiolin Zheng, Lu Wang, Lysandra Castro, Grace E Kissling, David K Walmer, Stanley J Robboy, Darlene Dixon. Human uterine leiomyoma-derived fibroblasts stimulate uterine leiomyoma cell proliferation and collagen type I production, and activate RTKs and TGF beta receptor signaling in coculture. *Cell Communication and Signaling* 01/2010; 8:10.
 40. M. C. Peavey, A. A. Shah, D. J. Raburn, D. K. Walmer, S. D. Copland, T. M. Price. Endometrial injury via saline-infusion sonohysterogram (SIS) performed within one month of cycle start does not improve live birth rate. *Fertility and Sterility* 96(3):1016, 2011.
 41. Raymer JH, Michael LC, Studabaker WB, Olsen GW, Sloan CS, Wilcosky T, Walmer DK. Concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) and their associations with human semen quality measurements. *Reprod Toxicol.* 2012 Jul;33(4):419-27. Epub 2011 Jun 29.
 42. Flake GP, Moore AB, Sutton D, Kissling GE, Horton J, Wicker B, Walmer D, Robboy S, Dixon D. The Natural History of Uterine Leiomyomas: Light and Electron Microscopic Studies of Fibroid Phases, Interstitial Ischemia, Inanosis and Reclamation. *Obstetrics and Gynecology International* 2013(8):528376, November 2013, DOI: 10.1155/2013/528376

Invited Publications

1. Subfertility Associated with Endometriosis: Potential Influences of the Peritoneal Environment, Walmer DK, Haney AF. *Seminars in Reproductive Endocrinology* 6(3):263, 1988.
2. Role of Peritoneal Environment in Endometriosis-Associated Subfertility. Walmer DK, Haney AF, Hammond CB. *Postgraduate Obstetrics and Gynecology* 10(10):1, 1990.
3. Superovulation and washed intrauterine insemination. Walmer DK, Dodson WC. *Infertility and Reproductive Medicine Clinics of North America* 1(1):135, 1990.
4. Superovulation and washed intrauterine insemination: An alternative to oocyte retrieval in infertile patients with patent fallopian tubes. Bachus KE, Walmer DK. *Contemporary Obstetrics and Gynecology* 37:77, 1992.
5. Superovulation in the management of unexplained infertility. Bachus KE, Walmer DK. *Reproductive Medicine Review* 2:33-49,1993.
6. Hormonal therapy in the perimenopausal woman. Walmer DK. *Postgraduate Obstetrics and Gynecology* 14(20):1 - 6, 1994.
7. Descriptive histology: The gold standard for clinically evaluating the endometrium. Is it about to be replaced? Hansard LJ, Walmer DK. *Infertility and Reproductive Medicine Clinics of North America* 6:281-291,1995.
8. Katz DF, Henderson MH, Owen DH, Plenys AM, Walmer DK: What is need 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. Proceedings of the 5th Contraceptive Research and Development Program Workshop, Bethesda, MD 11/7/97.

9. Newbold RR, DiAugustine RP, Risinger JI, Everitt JI, Walmer DK, Parrott EC, Dixon D: Advances in Uterine Leiomyoma Research: Conference Overview, Summary, and Future Research Recommendations. *Environmental Health Perspectives* 108:769-773, 2000.

Abstracts, Presentations

1. Melatonin Action During Hypobaric Hypoxia, O'Shea MD, Berkut MK, Walmer DK, *Journal of the Elisha Mitchell Society* 91: Summer, 1975, North Carolina Academy of Science.
2. Erythropoiesis in Male Castrated Mice Stimulated by Bleeding, Berkut MK, Herion JC, O'Shea MD, Walmer DK, 1975 Federation of the American Society for Experimental Biologists, Atlantic City, NJ, April 1975.
3. Response of Gonadectomized Mice to Erythropoietic Stimulation, Berkut MK, Walmer DK, O'Shea MD, *Journal of the Elisha Mitchell Society* 91: Summer 1975, North Carolina Academy of Science
4. The Influence of Melatonin on Erythropoiesis, Walmer DK, Berkut MK, O'Shea MD, *Journal of the Elisha Mitchell Society* 91: summer 1975, North Carolina Academy of Science
5. Renal Beta-glucuronidase Activity During Hypoxia, Walmer DK, Berkut MK, Sessions R, Cleary D, *Journal of the Elisha Mitchell Society* 92: Summer 1976, North Carolina Academy of Science
6. The Role of Glucuronylated Testosterone Metabolites in Hemopoiesis, Berkut MK, Walmer DK, O'Shea MD, 6th Annual Conference of the International Society for Experimental Hematology, Basel, Switzerland, *Experimental Hematology* 5:34, 1977
7. The Influence of Sialoadenectomy and Fluoride on Erythropoiesis in Polycythemic Mice, Walmer DK, Berkut MK, Cleary D, *Journal of the Elisha Mitchell Society* 93: Summer 1977, North Carolina Academy of Science
8. Ultrastructure of Proximal Convolutd Tubules in Normal and Cobalt-treated Mice, Walmer DK, Berkut MK *Journal of the Elisha Mitchell Society* 93:Summer 1977, North Carolina Academy of Science
9. Erythropoietic Activity of 5-beta Androstane Glucuronides, Berkut MK, Walmer DK, O'Shea MD, 93: Summer 1977, North Carolina Academy of Science
10. Extra-renal Erythropoiesis, Walmer DK, Berkut MK, 7th Annual Conference of the International Society for Experimental Hematology, Chicago, Illinois, *Experimental Hematology* 6:56, 1978
11. Enterococci in Postpartum Endometritis, Walmer DK, Walmer KAR, Gibbs RS, 6th Annual Meeting of the Society of Perinatal Obstetricians [Abstract 147], San Antonio, Texas, 2/1/86
12. Lactoferrin Localization in the Murine Reproductive Tract During the Estrus Cycle. Walmer DK, McLachlan JA, Nelson KG, Wrona M, Teng CT. Serono Symposium: Growth Factors in the Reproductive Tract, [Abstract 42], Savannah, Ga., April 1-4, 1990
13. The use of leuprolide as adjunctive therapy during controlled ovarian hyperstimulation and intrauterine insemination. Dodson WC, Hughes CL, Walmer DK, and Haney AF. 37th Annual Meeting of the Society for Gynecologic Investigation [Abstract 241], St. Louis, Mo., March 21-24, 1990
14. Altered structure and expression of the DCC gene in human endometrial carcinoma. Boyd J, Risinger JI, Walmer DK, Cho KR, Vogelstein B, Barrett CJ. 82nd Meeting of the American Association for Cancer Research
15. Molecular Genetic Alterations in Human Endometrial Carcinoma. Boyd J, Risinger JI, Walmer DK, Vogelstein B and Barrett JC. 1991 Keystone Symposium: Genomic Instability and Cancer, Tamarron, Co., February 4-10, 1991

16. The Presence of a TGF α Transgene Results in Reproductive Abnormalities in Female CD-1 Mice. Walmer DK, Wrona M, Feola R, Nelson K, Bossert N, Dickson R, Merlina G, McLachlan J. Keystone Symposium of Molecular, Cellular Biology, Keytone, Co. J Cell Biochem 16F:84(W125),1992.
17. Human oocyte fertilization: Influence of reinsemination and media change after the first 18 hours of culture. Walmer DK, Bachus KA, Bossert NL, [Abstract 171], 39th Annual Meeting of the Society for Gynecologic Investigation, San Antonio, Tx, 3/19/92.
18. The Presence of a TGF α Transgene Results in Reproductive Abnormalities in Female CD-1 Mice. Walmer DK, Wrona MA, Feola R, Nelson KG, Bossert NL, and McLachlan J, [Abstract], Triangle Conference on Reproductive Biology, Research Triangle Park, NC, 1/11/92.
19. Identification and Characterization of Novel Human Endometrial Protein Tyrosine Kinases: New Insights into the Regulation Endometrial Activity. Couchman G, Nelson K, Carpenter S, McLachlan J, Walmer DK. Triangle Conference on Reproductive Biology 1/9/93
20. The Expression of Lactoferrin in the Human Endometrium by Inflammatory Granulocytes and Glandular Epithelium: A Possible Role in Growth Regulation. Padin C, Nelson K, McLachlan J, Walmer DK. Triangle Conference on Reproductive Biology 1/9/93
21. TGF β Expression in the Cycling Human Female Reproductive Tract: Parallels with wound repair. Walmer DK, Padin C, Flanders K, Kohler M, McLachlan J, Nelson K. Triangle Conference on Reproductive Biology 1/9/93 (#38)
22. TGF β Expression in the Cycling Human Female Reproductive Tract: Parallels with wound repair. Walmer DK, Padin C, Flanders K, Kohler M, McLachlan J, Nelson K. Journal of Cellular Biochemistry 17E:123, 1993 (#R2160)
23. Cytokine expression profiles in endometriosis, endometrial carcinoma, and normal endometrium. Boyd J, Walmer DK, American Association of Cancer Research 1993
24. Lactoferrin is overexpressed in proliferative disorders of the endometrium. Reproductive Biology Special Interest Group, American Fertility Society, Montreal, Canada, 10/13/93, (P-286)
25. Identification of a novel human endometrial protein tyrosine kinase: its expression and role in normal and abnormal endometrium. Couchman G, Walmer DK. The American Fertility Society. Montreal, Canada, 10/13/93.
26. Platelet-derived growth factors and receptors are expressed in vivo in normal and pathologic human endometrium. P. Blohm, K. Nelson, B. Healy, J. McLachlan, Walmer DK. Reproductive Triangle Symposium 1993
27. Differential expression of epidermal growth factor-related proteins in human uterus and mouse uterus and vagina. Walmer DK, A. Drapkin, E-S Ro, G. Johnson, J. McLachlan, K. Nelson. Reproductive Triangle Symposium 1993
28. Hepatocyte Growth Factor: Another modulator of reproductive function? K. Raszmann, M-S Tsao, Walmer DK, N. Bossert, T. Nakamura, J. McLachlan, K. Nelson. Reproductive Triangle Symposium 1993
29. Estrogen stimulation of TGF $\beta_{1,2\&3}$ mRNA and protein expression in mouse uterus and vagina: a comparison to other estrogen-regulated genes. T. Takahashi, B. Eitzman, M. Bidwell, N. Bossert, Walmer DK, K. Raszman, K. Flanders, J. McLachlan, K. Nelson. Estrogens in the Environment III. Global Health Implications, 1/9-11/94
30. Zonation of the human endometrium: Analysis of estrogen receptors, progesterone receptors and markers of cellular proliferation. Martha L. Ehrmann, MD, Bridget E. Healy, DVM, Walmer DK, MD, PhD, Presented at 1994 Resident's Day, Department of Obstetrics and Gynecology, Duke University Medical Center

31. The predictive value of sperm swim-up migration in human in vitro fertilization. Bossert NL, CA Cutney, Walmer DK and KE Bachus, Presented and the 1995 annual meeting of the American Society of Andrology. March 31 - April 4, Raleigh, NC
32. Women with mild endometriosis who have failed COH have IVF pregnancy rates equivalent to or superior to that of tubal factor patients. B.D. Barnett, K.E. Bachus, G.M. Couchman, A.F. Haney, D.K. Walmer, Oral Presentation at the 1995 Annual Meeting of the American Society of Reproductive Medicine, Seattle, WA
33. *Lyn*, a *src*-related tyrosine kinase, is dysregulated in leiomyomata of the human uterus. G. Couchman, R. Bentley, Ming-Sound Tsao, K. Raszmann, J. McLachlan, Walmer DK. Oral Presentation at the 1995 Annual Meeting of the American Society of Reproductive Medicine, Seattle, WA
34. Expression of cytoplasmic and extracellular transforming growth factor antigens in human endometrium during the menstrual cycle correlates with physiologic markers. L.Hansard, B. Gardner, M. Ehrmann, R. Bentley, J. McLachlan, A. Drapkin, Walmer DK. Oral Presentation at the 1995 Annual Meeting of the American Society of Reproductive Medicine, Seattle, WA
35. Endometriosis and the Environment: Biomarkers of Toxin Exposure. J. Boyd, G. Clark, Walmer DK, D. Patterson, L. Needham, G. Lucier. Endometriosis Workshop, Bethesda, MD, NICHD, 5/15/95.
36. Identification and regulation of the apoptosis-associated gene, BAX in human granulosa/luteal cells. Gorman EA, Walmer DK, Schomberg DW Presented at Resident's Day, Department of Obstetrics and Gynecology, Duke University Medical Center, June 10, 1995.
37. Intrauterine fetal position influences the development of the reproductive tract in mice. Battin C, Walmer D, Vandenberg J. Presented at Resident's Day, Department of Obstetrics and Gynecology, Duke University Medical Center, June 10, 1995.
38. Platelet Derived Growth Factor expression in uterine myometrium and dysregulation in leiomyomas. Soufi W, Johnson P, Couchman G, Healy B, Walmer D. Presented at Resident's Day, Department of Obstetrics and Gynecology, Duke University Medical Center, June 10, 1995.
39. The postcoital test does not correlate with fecundity in cycles utilizing gonadotropin-induced superovulation. MR Bush, Walmer DK, GM Couchman, AF Haney. Submitted to Armed Forces District Meeting.
40. The expression of yes, a *src*-family tyrosine kinase, is altered in leiomyomas and associated myometrium. Osborn B, Barnett B, Walmer D, Bentley R, Plaehn E, Couchman G. Accepted for Oral Presentation ASRM, #436, Boston, Ma.11/4/96 (2:00pm)
41. Advanced maternal age and perinatal outcome: oocyte reciprocity versus natural conception. Wolff KM, McMahon MJ, Kuller JA, Walmer DK, Meyer WR, Presentation at American College of Obstetrics and Gynecology meeting, 1997
42. The effect of contraceptive progestins on the ovarian epithelium: Cancer prevention through apoptosis. Rodriguez GC, Walmer D, Lessey B, Whitaker R, Krigman HR, Hughes CL. Presented Plenary Session - SGI, 1997.
43. A Method for Observation and Analysis of Contraceptive Gel Spreading and Retention on the Vaginal Epithelium. Henderson MH, Yezbick AB, Walmer DK and Katz DF, American Society for Reproductive Medicine, 1998
44. *In vivo* sensing of formulation distribution in the human vagina: initial results. MH Henderson, DK Walmer, MA Brown, DF Katz. Journal of the Society for Gynecologic Investigation

- 6(1):161A, 1999. Abstract 450. 46th Annual Meeting of the Society for Gynecologic Investigation, Atlanta, GA.
45. Estradiol-stimulated mitosis and Cdk1 activity are reduced in the insulin receptor substrate-1 knockout mouse uterine epithelium. Society of Endocrinology meeting 2001
 46. Epidemiologic Evaluation of Perfluorooctyl Compounds as Endocrine Disruptors in Males. Raymer, J.H., M. Gardner, Y. Hu, T. Wilcosky, and D. Walmer. Analytical Methods and Study Design. Poster Presented at the 12th Annual Conference of the International Society of Exposure Analysis. New Orleans, LA, August 11–15, 2002.
 47. PCOS: Trying to unravel 70 years of confusion. DK Walmer. Visiting Professor, Ob/Gyn Resident Education Day, Greenville Hospital System University Medical Center. February 3, 2006.
 48. A culturally relevant approach to cervical cancer. DK Walmer, D Merisier. Conference Medical et Scientifique International, March 25–28, 2003
 49. Relationship of PFOS/PFOA Concentrations in Human Male Plasma and Semen to Semen Quality and Hormonal Status. Raymer, J.H., D. Walmer, M. Gardner, C. Sloan, T. Wilcosky, Y. Hu, T. Marrero, and M. Burton. Oral Presentation at the 13th Annual Conference of the International Society of Exposure Analysis. Stresa, Italy, September 21-25, 2003.
 50. Relationships of PFOS/PFOA concentrations in Human Male Plasma and Semen to Semen Quality and Hormonal Status. Raymer, J.H., D. Walmer, M. Gardner, C. Sloan, T. Wilcosky, Y. Hu, P. Fail, T. Marrero, and M. Rice. Oral Presentation at the e-Hormone Conference, Tulane University. New Orleans, LA, October, 2004.
 51. 2004. Relationships of PFOS/PFOA concentrations in Human Male Plasma and Semen to Semen Quality and Hormonal Status. Raymer, J.H., D. Walmer, M. Gardner, C. Sloan, T. Wilcosky, Y. Hu, P. Fail, T. Marrero, and M. Rice. Oral Presentation at the Annual Meeting of the ISEA, Philadelphia, PA, October, 2004.
 52. 2005. PFOS/PFOA in Human Male Plasma and Semen Related to Semen Quality and Hormonal Status. Raymer, J.H., D. Walmer, C. Sloan, T. Wilcosky, B. Levine, W. Studabaker, M. Gardner, and J. Deese-Spruill. Oral Presentation at the 15th Annual Meeting of the ISEA. Tucson, AZ, October, 2005.
 53. Healing in the Developing World and Care of the Underserved: Medical Theological Considerations, A collaborative course with the Schools of Medicine, Divinity and Nursing. Edwards D, Otroszko K, Walmer D. Duke Global Health Symposium April 17, 2006.
 54. High resolution analysis of human vaginal coating by anti-HIV microbicide drug delivery formulations. Marcus H. Henderson, David K. Walmer, Grace M. Couchman, Jenny J. Peters David F. Katz, Biomedical Engineering Society, October 11-14, 2006.
 55. Fertility patients' preferences and attitudes about gamete donation: What kind of donor and donor program do they want? Annual Meeting of the American Society for Reproductive Medicine, ASRM 2006, October 21-25, 2006, in New Orleans, Louisiana. P-672
 56. Update on etiology & treatment of recurrent 1st trimester pregnancy loss. Walmer DK. Honduran National Ob/Gyn Society Meeting, July 28-29,2006 (oral presentation)
 57. New directions in ovulation induction. Walmer DK. Honduran National Ob/Gyn Society Meeting, July 28-29,2006 (oral presentation)
 58. The origins and etiology of polycystic ovarian syndrome: Trying to unravel 70 years of confusion. Walmer DK. Honduran National Ob/Gyn Society Meeting, July 28-29,2006 (oral presentation)

59. Predictors of Pregnancy Loss and Biochemical Pregnancy in Patients Undergoing In Vitro Fertilization with and without ICSI. Johnstone E, Behera M, Jamison M, Stinnett S, Couchman G, Walmer D. Resident's Day, June 2006
60. Transport Theory For HIV Migration Through In Vivo Distributions Of Microbicide Epithelial Coating Layers. Lai BE, Henderson MH, Peters JJ, Walmer DK, Katz DF. Biophysical Society Meeting, February 2009
61. Carolina and Duke Consortium Conference: The Idea of the Americas: Representation and Reality, February 13-14, 2009 – Panel discussion: Fact and Fiction about Health Care Outreach Experiences in Latin America and the Caribbean, Room 1009 GEC
Participants: Cheryl Baker (Duke Medicine), Nicaragua, Dennis Clements (Duke Pediatrics and Global Health Institute), Honduras, Jean Davison (UNC School of Nursing), Honduras
Anne Martin-Staple (Duke Center for Health Policy), Jamaica, David Walmer (Duke Obstetrics & Gynecology), Haiti, Chair: Diane Nelson (Duke Cultural Anthropology)
62. Health Law, Ethics, and Global Health Lecture Series Panel, June 11, 2009
63. Early Transmitted/Founder HIV-1 Infection and Spread in Peritoneal Tissue Macrophages In Vitro. Schutte RJ, Liu P, Overman RG, Weinberg JB, Walmer DK, Free SA, Edmonds TG, Oschenbauer C, Kappes JC, Denny TN, Shattock R, Haynes BF, Tomaras GD. Center for HIV-AIDS Vaccine Immunology 2009 Annual Meeting, September 15, 2009, Durham, NC
64. A careHPV™ reflex test to triage HPV+ women in economically constrained community screening programs
Laura Bell, Niwashin Shrestha, Sameera Rangwala, Lori Kobayashi, Jackie Ndirangu, David Walmer, Philip E. Castle, Paul Eder¹QIAGEN, Inc. Gaithersburg, USA; ²Family Health Ministries and Duke University Medical Center, Durham, USA; ³NCI/NIH, Rockville, USA
65. Joseph Obure, Pendo Mlay, Gileard Masenga, Olola Oneko and David Walmer; A higher proportion of squamous intraepithelial lesion of cervix in symptomatic HIV-infected women at a tertiary health center in Tanzania; 12th, International Conference on Malignancies in AIDS and other acquired Immunodeficiency's (ICMAOI) at NIH, April 26-27 2010.
66. Outstanding Medicine: Innovation for Social Good, Saturday, September 24 from 10:30am-12:00pm. Panelists: David Walmer, MD, PhD, Ross McKinney, MD, Wesley Burks, MD, Malik Burnett, Dr. Diana McNeill (Moderator)
67. Cervical Cancer Prevention and Screening in Low Resource Countries, Triangle Global Health Consortium, NC Biotechnology Center, September 29, 2011, 7:30am

Sponsored Research

Title: Human Immunodeficiency Virus Infection in Peritoneal Macrophages

Sponsor: Human Vaccine Institute

Role: Investigator

Project period: June 2008 – present

Objective: The overall goal of this study is to examine HIV infection in peritoneal macrophages and to understand the immune responses that might serve to limit infection in this cell population

Title: Correlation of HPV genotypes with stages of liquid-based cervical cytopathology in an unscreened population of women in Leogane, Haiti.

Sponsor: Family Health Ministries, Inc

Principal Investigator: David K. Walmer, MD, PhD

Project period: May 2009 – present

Objective: To determine the potential utility of introducing existing HPV vaccines into Haiti by determining if HPV 16 & 18 are more common in advanced cervical dysplasia & cervical cancer.

Title: FastHPV Reagent Stability Testing

Sponsor: Qiagen, Inc

Principal Investigator: David K. Walmer, MD, PhD

Project period: Dec 2008 – present

Objective: To provide Qiagen Corporation with cervical cytology specimens from a largely unscreened population of women in Leogane, Haiti so that Qiagen can evaluate the stability of reagents that are being developed for the *careHPV* assay.

Title: Database and Specimen Repository for African HIV-Related Studies

Sponsor: Department of Medicine, Duke University

Role: Co-Investigator

Project period: Nov 2008 - present

Objective: To allow archived HBM with data and/or data to be stored for future research purposes, while protecting the identity of human subjects from whom such samples were obtained.

Title: Prospective Randomized Double-Blind Study of Sperm Production in Healthy Volunteers Receiving Pregabalin or Placebo

Sponsor: Pfizer Protocol: A0081104

Role: Principal Investigator

Project period: Aug 2008 - present

Objective: To evaluate the effect of Pregabalin on semen parameters

Title: Evaluation of risk factors for malnutrition among children attending the Sainte Antoine School in the Fondwa Mountain Community

Sponsor: Family Health Ministries, Inc

Role: Principal Investigator

Project period: Jul 2008 - present

Objective: To evaluate risk factors for malnutrition among children attending the Sainte Antoine School in the Fondwa Mountain Community

Title: Biophysical Analysis of Vaginal Gel Deployment In Vivo

Sponsor: NIH

Role: Faculty Sponsor / Co-Investigator

Project period: Jul 2008 - present

Objective: To compare the spreading and adhesion of four vaginal gels: Conceptrol® (Advanced Care Products, Ortho Pharmaceutical Corp.), Advantage-S™ (Columbia Laboratories, Inc.), KY Jelly® (Personal Products Company, McNeil-PPC, Inc.), and Replens® (Columbia Laboratories, Inc.) by in situ fluorimetry with the goal of finding potential vehicles for HIV anti-infective agents.

Title: Human Immunodeficiency Virus Infection in Peritoneal Macrophages
Sponsor: Center for HIV-AIDS Vaccine Immunology
Role: Co-Investigator (PI: Bart Haynes, MD)
Project period: Jun 2008 - present
Objective: To examine HIV infection in peritoneal macrophages and to understand the immune responses that might serve to limit infection in this cell population.

Title: 4D Intraperitoneal Saline Sonogram (IPS)
Sponsor: Department of Ob/Gyn, Duke University
Role: Principal Investigator
Project period: Feb 2008 - present
Objective: To determine if tubal patency and pelvic adhesions can be accurately diagnosed by creating an iatrogenic ascites and performing a 4D sonogram of the pelvic adnexa using conscious sedation.

Title: Evaluating the impact of inflammation on obscuring dysplasia in liquid-based & conventional cervical cytology specimens in Leogane, Haiti
Sponsor: Family Health Ministries, Inc.
Role: Principal Investigator
Project period: Feb 2008 – present
Objective: To determine if GIS data analysis can be used to identify to efficiently direct health care resources

Title: GIS Health Data in the Blanchard Neighborhood of Haiti: Can Assessment of Community Needs Guide Community Public Health Practice?
Sponsor: Family Health Ministries, Inc.
Role: Principal Investigator
Project period: Apr 2007 – Apr 2009
Objective: To determine if GIS data analysis can be used to identify to efficiently direct health care resources

Title: Haiti Parallel Performance Trial: FastHPV vs. hc2
Sponsor: Digene Corporation
Role: Principal Investigator
Project period: May 2007 – Dec 2007
Objective: To prove the feasibility of the prototype FastHPV test as a robust screening test that can be successfully implemented in low-resource environments.

Title: A Multicenter Randomize Clinical Trial Comparing the Smith & Nephew Operative Hysteroscopy System vs. Loop Resectoscopy Trial
Sponsor: Smith & Nephew
Role: Principal Investigator
Project period: Feb 2005 - Feb 2006
Objective: To evaluate the efficacy of operative hysteroscopy systems vs. loop resectoscopy

Title: International Studies of AIDS-Associated Co-Infections (ISAAC) RFA AI-03-036
Sponsor: NIH/NAAID International Clinical Trials Unit

Role: Co-Investigator (PI: John Bartlett, MD)

Project period: Jul 2004 – Jul 2008

Objective: To study the relationship between HIV and HPV infections in Moshi, Tanzania

Title: Epidemiologic Evaluation of Perfluorooctyl Compounds as Endocrine Disruptors in Males

Sponsor: Research Triangle Institute

Role: Principal Investigator

Project period: Sep 2001 – Aug 2005

Objective: To look for a relationship between environmental exposures to perfluorooctyl compounds and semen parameters.

Title: Prospective Evaluation of the AutoCyte PREP Slide Preparation using the PREPMate 2000 and the PREP Manual Method

Sponsor: TriPath Imaging

Role: Principal Investigator

Project period: 1999 - 2001

Title: Repronex SC versus Repronex IM and Pergonal IM in In Vitro Fertilization

Sponsor: Ferring Laboratories, Inc

Role: Principal Investigator

Project period: 1997

Title: A Phase 3, Multicenter, Double-blind, Double-dummy, Randomized Parallel Group Study to Compare the Safety and Efficacy of Recombinant Human Luteinizing Hormone (r-hLH) with Profasi (Urinary Human Chorionic Gonadotropin) in Inducing Final Follicular Maturation and Early Luteinization in Infertile Women Undergoing Ovarian Stimulation with Gonal-F (Recombinant Human Follicle Stimulating Hormone) Prior to In Vitro Fertilization and Embryo Transfer (IVF-ET)

Sponsor: Serono Laboratories, Inc

Role: Principal Investigator

Project period: 1997

Title: Gonal-F in the treatment of infertility caused by female hypogonadism

Sponsor: Serono Laboratories, Inc

Role: Principal Investigator

Project period: 1995 - 1997

Title: Safety and efficacy of recombinant hCG versus urinary hCG in women undergoing IVF/ET

Sponsor: Serono Laboratories, Inc

Role: Principal Investigator

Project period: 1995 - 1997

Title: Signal Transduction of Estrogen in the Human Endometrium

Sponsor: NIEHS

Role: Principal Investigator

Project period: 1993-1997

Objective: To elucidate signaling pathways involved in estrogen action in the human endometrium.

Faculty Preceptor for Masters in Global Health Research

Dates: 2009 - 2010

Student: Jackie Wanjiku Ndirangu

Project: Prevalence and genotype distribution of human papillomavirus in women with cervical histopathology in Haiti

Thesis defense: 15th December, 2012

Employment status 17Mar13: RTI International: Public Health Analyst and Project Manager in Pretoria, South Africa

Manages an NIH-funded randomized control study that aims to provide a combination bio behavioral, HIV-prevention approach to at-risk women in South Africa. (Recruits women from high-risk vulnerable populations in Pretoria, South Africa to ensure that they receive and continue to take antiretroviral therapy (ART) if they are HIV positive, and for those who test HIV negative, ensure that they remain HIV negative. The project also assists in referral to drug and alcohol rehabilitation and skills development through networking with the local departments and NGOs.

Dates: 2010 - 2011

Student: Kate Wiegert

Project: Need assessment for improved maternal health care services in rural Haiti
Selected for oral presentation at AOA day and won best presentation

Dates: 2010 - 2011

Student: Marnie Cooper-Priest

Project: Traditional birth attendant education in Fondwa, Haiti

Thesis defense:

Dates: 2011 - 2012

Student: Nahida Chaktoura, MD

Project:

Thesis defense: Oct 2012

Current employment: Maternal & Pediatric Infectious Disease branch of NICHD, NIH

Dates: 2011-2012

Student: Fan Yang

Project: Reproductive health beliefs and the utilization of modern contraception in Leogane, Haiti

Thesis defense:

Committee member for Masters in Global Health Research

Dates: 2011-2012

Student: Erin Dainty

Project:

Dates: 2014-2015

Student: Hwee Min Loh (Duke Kunshan University MSc-GH Graduate)

Project: Peer-Informed Learning on Increasing Contraceptive Knowledge Among Women in Rural Haiti (1st MSc-GH graduate from the Kunshan U. campus)

Dates: 2015- 2016

Student: Nicole Jadue Gonzalez (MSc-GH Graduate)

Project: Power on Choice and Uptake of Long Acting Contraceptives

Dates: 2016-2017

Student: Rebecca Rice (MSc-GH candidate 2017)

Project: Research Ethics Training in Haiti

Dates: 2017-2018

Student: Allia Vaez (MSc-GH candidate 2018)

Project: Vaginal Self-sampling with CareHPV in rural Haiti

Dates: 2017-2018

Student: Sangi Naomie Kadima (MSc-Gh candidate 2018)

Project: Effect of pro-breastfeeding educational sessions on exclusive breastfeeding duration and interruption of traditional feeding practices in Fondwa

Faculty Preceptor for 3rd year medical student research

Cell and Regulatory Biology:

Dates: 1993 – 1994

Student: Annie Drapkin

Project: TGF-alpha expression in normal, proliferative disorders of human endometrium

Dates: 1991 - 1992

Student: Cheryl Padin

Project: Lactoferrin expression in normal, proliferative disorders of human endometrium

Faculty Adviser/ Preceptor for other student projects

Dates: 2009

Student: Nora Dennis (medical student)

Role: Faculty Adviser: Nathan Grant

Project: Implementing a community health worker program to improve prenatal care in Mali

Dates: 2006

Student: Stesha Doku

Role: Preceptor

Project: Utilization of GIS in studying co-factors related to cervical cancer in Haiti

Dates: 2001

Student: Matthew Baugh (undergraduate)

Role: Preceptor
Project: Worked with community in Fondwa, Haiti to develop 18 songs that contained health messages. These were played on the radio in Haiti. (Matthew was given a special commendation from Sec. of State, Madeline Albright for this project)

Dates: 2000
Student: Katie Deming (medical student)
Project: Survey of 925 women in Leogane, Haiti re: Understanding of Cervical Cancer

Faculty Preceptor for Ob/Gyn resident research

Dates: 2001-2002
Resident: Chad Grotegut
Project: Cystic Fibrosis gene mutations in women with unexplained infertility

Dates: 1998-1999
Resident: John Lancaster
Project: Estrogen and progesterone receptor gene polymorphism in uterine leiomyomas

Dates: 1995-1996
Resident: Barbara Osborne
Project: Dysregulation of src-related tyrosine kinases in uterine leiomyomata

Dates: 1995-1996
Resident: Craig Gaccione
Project: Bax: A regulator of apoptosis in granulosa cell apoptosis *in vivo*?

Dates: 1993-1994
Resident: Winni Soufi
Project: PDGF B and receptor beta expression is dysregulated in uterine leiomyomas

Dates: 1993-1994
Resident: Chris Battin
Project: Microenvironments in human endometrium: Zonal expression of ER, PR and MIB-1

Dates: 1992-1993
Resident: Martha Ehrmann
Project: Microenvironments in the human endometrium: an analysis of ER, PR and Ki-67

Dates: 1991-1992
Resident: Allison Blomer
Project: Hepatic clearance blunts the bioactivity of estradiol on the endometrium

PhD Committees

Date: 2007

Candidate: Kelly Braun
Thesis: Designing a spectral domain optical coherence tomography system to assess microbicidal gel deployment and distribution on epithelial tissue
Institution: Department of Biomedical Engineering, Duke University
PhD Adviser: Adam Wax

Date: 2002
Candidate: Andrew Hotchkiss
Thesis: Neonatal Endocrine Events and Selected Endocrine Disrupter Effects in Rodents
Institution: Department of Zoology, NC State University
PhD Adviser: John Vandenberg

Date: 2002
Candidate: Sarah Kieweg
Thesis: Physicochemical properties of vaginal gels as a vehicle for anti-infective agents
Institution: Department of Biomedical Engineering, Duke University
PhD Adviser: David Katz

Faculty preceptor for reproductive endocrinology fellow research

All projects centered around molecular signally pathways in human endometrium

2001–2002 John Payne
2000–2001 Fred Larsen
1999–2000 Ernie Zeringue
1996–1997 Mark Bush
1995–1996 Brian Barnett
1994–1995 Lisa Hansard
1993–1994 Patrick Blohm
1992–1993 Grace Couchman
1991–1992 Mark Bidwell

Faculty preceptor for public health student research

Dates: 2007–2008
Student: Kemi Ogundipe
Project: Patterns in nutritional status of school age children in relation to location and socioeconomic status in the Fondwa mountain community of Haiti
Degree: MPH, Maternal & Child Health

Dates: 2007–2008
Student: Nora Dennis
Project: Evaluation of Colposcopy and HPV typing as a strategy for identifying cervical dysplasia in Leogane, Haiti
Degree: MPH, Maternal & Child Health

Dates: 2006–2007

Student: Joel Boggan
Project: GIS Health Data in the Blanchard Neighborhood of Haiti: Can Assessment of Community Needs Guide Community Public Health Practice?
Degree: MPH, Maternal & Child Health

Dates: 2005-2006
Student: Jessica Kenerson
Project: A Prospective Blinded Evaluation of Colposcopy as a Strategy for Identifying Cervical Dysplasia in a Low Resource Community
Degree: MPH, Maternal & Child Health

Faculty preceptor for biomedical engineering student research

Dates: 2007-2008
Student: Theo Tam, Ram Balasubramanian, Adnan Haider, Gauravjit Singh, Wynn Xiao Wu
Project: CURES Competition: Development and Marketing of Portable Colposcope (1st place)

Dates: 2006-2007
Student: Frank Frank Dreher, Lorena Lee-Houghton, Peter Blais
Project: CURES Competition: Development and Marketing of Portable Colposcope (2nd place)

Faculty preceptor for undergraduate student research

Dates: 2006-2007
Student: Mingyang Liu
Research: Evaluation of local health care services in Leogane, Haiti
Adviser: Kristin Goss (Duke University)

Dates: 2005-2006
Student: Kaitlin Hancock
Research: Longitudinal evaluation of nutritional supplements on the health status of the female population in Fondwa, Haiti
Adviser: Deborah Gold (Human Development, Duke University)

Committees

Society of Reproductive Endocrinology and Infertility
Practice Guidelines Committee, 2004 - 2008

Duke University Medical Center
Institutional Review Board, (Vice Chairman for IRB#4), 2000
Clinical Sciences Faculty Council, 1997 - 1999
Institutional Review Board, (sole Ob/Gyn representative) 1990 – 2000

Southeastern Reproductive Medicine Association
Protocol Review Committee Chairman, 1998 – 1999
Protocol Review Committee Member, 1995 – 1998

American Society of Reproductive Medicine
Resident Education Committee, 1994 – 1997

Organization participation and memberships

American Board of Obstetrics and Gynecology
ABOG Subspecialty board examiner 2004 - 2009
American Society of Reproductive Medicine
Duke Cancer Research Center
North Carolina Obstetrics and Gynecology Society
Society for Assisted Reproductive Technologies
Society of Reproductive Endocrinologists
PADI Diving Society

Ad Hoc Reviews

American Journal of Obstetrics and Gynecology
American Journal of Pathology
Endocrinology
Fertility and Sterility
International Journal of Andrology
Journal of Clinical Endocrinology and Metabolism
Journal of the Society for Gynecologic Investigation
Obstetrics and Gynecology

Inventions:

Portable Colposcope / CerviScope 1996 – present



Version #1: 6x surgical loupes, bicycle halogen headlamp – collaborator: Gus Rodriguez, MD, 1996
Version #2: 6x surgical loupes, mounted LED lighting, waist battery pack – collaborator: Marcus Henderson, PhD, 1996 - 2006
Version #3: endoscope with digital camera (CURES competition 2007) – collaborators: student team
Version #4: 12x binoculars with adjusted focal length, LED lighting, head-mounted batteries (see left) (CURES competition 2008) – collaborators: student team

Ongoing usability testing (above):

1. Ethiopia, Kim Scheel, MD, (Serving in Mission)
2. Guatemala, Kristina McCain, MD (Health Talents International)

Awards/Honors

- Oct 2002 Duke University Humanitarian Service Award
- 08 May 2006 Leonard Tow Humanism in Medicine Award
Arnold P. Gold Foundation
- 2008-2013 Best Doctor's Award (selected by NC Ob/Gyn peers)
- 2008-2013 Castle Connolly America's Top Doctors for Women
(Nov issue of Women's Health)
ID: 12CC001097
- 08 Dec 2009 Jerry Nance Community Service Award
- 02 Nov 2010 Duke University Diversity Award

Teaching

Course Director for "Issues of Healing in the Developing World and Care of the Underserved: A Medical and Theological Perspective"

1st class of students went to Haiti in October of 1996

Medical School IND304C Approved by curriculum committee Fall 1997

Divinity School PASTCARE211 Approved by curriculum committee Fall 2000

Global Health Institute GLHLTH211 Approved by curriculum committee Fall 2008

The course includes a one week trip to Haiti during spring break.

Medical Advisor for CBS movie (1st mother / daughter surrogate pregnancy) Labor of Love: The Arlette Schweitzer Story, aired Mother's Day 1993 Carolco Studios, Wilmington, NC