

JENNIFER FLATOW CULHANE

Department of Obstetrics and Gynecology
Drexel University College of Medicine
245 N. 15th Street, 17th Floor
Philadelphia, PA 19102
215-762-2013
fax: 215-762-2310
email: jennifer.culhane@drexelmed.edu

4636 Larchwood Avenue
Philadelphia PA, 19143
215-386-7173

EDUCATION

- Ph.D. Public Health, 1998
 Temple University, Philadelphia
 Dissertation: Psychosocial Risk Factors Associated with Deaths Among Infants
 and Extremely Premature Infants: A Case-Control Study.
- MPH Public Health, 1993
 Temple University, Philadelphia
- BA Biochemistry, Magna cum laude, 1985,
 Mount Holyoke College, South Hadley, MA

WORK EXPERIENCE

- May 1985 - June 1988 Research Associate, Dana Farber Cancer Institute, Boston
 Massachusetts.
- July 1988 – June 1990 Senior Research Scientist, T-Cell Sciences, Cambridge
 Massachusetts.
- June 1994 - September 1997 Graduate student, Temple University Department of Health
 Studies, Philadelphia, PA.
- September 1990 - May 1994 Full time graduate student, Temple University, Department of
 Health Studies, Philadelphia, PA.
- June 1994 - September 1997 Research Associate, Thomas Jefferson University, Department of
 Pediatrics, Philadelphia, PA.
- May 1996 – January 1998 Director of the *Healthy Start* evaluation, Philadelphia Department
 of Public Health, Office of Maternal and Child Health.
- October 1997 - July 2001 Director of Research, The Health Federation of Philadelphia,
 Philadelphia, PA.
- September 2001- Current Research Associate, Population Study Center, Department of Sociology,
 University of Pennsylvania, Philadelphia, PA.
- July 2001 – March 2004 Assistant Professor of Obstetrics and Gynecology, Thomas
 Jefferson University, Jefferson Medical College. Philadelphia, PA.
- March 1, 2004 – current Associate Professor of Obstetrics and Gynecology, Drexel University
 College of Medicine, and Drexel University School of Public Health
 Philadelphia, PA.

PUBLIC SERVICE AWARDS

- 2002 Society for Maternal-Fetal Medicine, Award of Research Excellence, poster presentation: Racial/Ethnic Differences in BV in Pregnancy: The Role of Individual and Contextual-level Maternal Stress, Culhane, JF, Rauh VA, Hogan V, McCollum K, Wadhwa PD.
- March 2005 Committee on Understanding Premature Birth and Assuring Healthy Outcomes, Institute of Medicine.

PUBLICATIONS

- Rosowsky A, Wright JE, Cucchi CA, **Flatow JL**, Trites DH, Teicher BA, Frie E. Collateral methotrexate resistance in cultured human head and neck carcinoma cells selected for resistance to cis-diamminedichloroplatinum (11). *Cancer Research*, 1987; 47(22): 5913-8.
- Wright JE, Rosowsky A, Waxman DJ, Trites DH, Teicher BA, **Flatow JL**, Frie E. Metabolism of methotrexate and gamma-tert-butyl methotrexate by human leukemic cells in culture and by hepatic aldehyde oxidase in vitro. *Biochemical Pharmacology*, 1987; 36 (13): 2209-1.
- Teicher BA, Cucchi CA, Lee JB, **Flatow JL**, Rosowsky A, Frie E. Alkylating agents: In vitro studies of cross-resistance patterns in human cell line. *Cancer Research*, 1987; 46 (9): 4378-9.
- Teicher BA, Crawford JM, Holden SA, Cathcart KN, Luchette CA, **Flatow JL**. Glutathione monoethylester can selectively protect liver from high dose BCNU or cyclophosphamide. *Cancer*, 1988; 62 (7): 1275-8 1.
- Keystone EC, Rittershause C, Wood N, Snow KM, **Flatow JL**, Purvis JC, Poplonski L, Kung P. Evaluation of gamma delta T-cell subset in peripheral blood and synovial fluid of patients with rheumatoid arthritis. *Clinical Experimental Immunology*, 1991; 84(1): 78-82.
- Wright JE, Rosowsky A, Cucchi CA, **Flatow JL**, Frie E. Methotrexate and gamma-tert-butyl methotrexate transport in CEM and CEM/MTX human leukemic lymphoblasts. *Biochemical Pharmacology*, 1993; 46(5): 871-6.
- Culhane D, **Culhane JF**. The elderly's underutilization of partial hospitalization services and the history of Medicare reimbursement policies. *Journal of Geriatric Psychology*, 1993; 269(1): 95-112.
- Haignere C, **Culhane JF**, Balsley C, Legos P. Sexuality education: Teacher's receptiveness and comfort using non-traditional teaching strategies. *Journal of School Health*, 1996; 66(4): 125-53.
- Teicher BA, Holden SA, Cucchi CA, Cathcart KN, Korbut, TT, **Flatow JL**, Frie E. Combination of N,N',N''-triethylenethiophosphomide and cyclophosphamide in vitro and in vivo. *Cancer Research*, 1998; 48(1): 94-100.
- Kornhauser MS, Baumgart S, Desi SA, Stanley CW, **Culhane JF**, Cullen JA, Wiswell-TE, Graziani LT, Spitzer AR. Adverse neurodevelopmental outcomes in infants with 8PD treated with ECMO. *Journal of Pediatrics*, 1998; 132(2): 307-11.
- Gibson E, Flemming N, **Culhane, JF**, Flemming D, Spitzer A. Changes in SIDS rate following the American Academy of Pediatrics sleep position recommendation. *Medical Care*, 1998; 36(6): 938-42.
- Gibson E, **Culhane JF**, Saunders T, Webb D, Greenspan J. Effect of non-viable infants on the infant mortality rate in Philadelphia, 1992. *American Journal of Public Health*, 1999; 90(8): 1303-6.
- Rauh VA, **Culhane JF**, Hogan VK. Bacterial vaginosis: A public health problem for women. *JAMWA*, 2000; W55(4): 220-4.
- Webb D, **Culhane JF**, Snyder S. Pennsylvania's early discharge legislation: Impact on maternity length-of-stays and costs of hospitalization in Philadelphia. *Health Services Research*, 2001; 36(6pt1): 1073-83.
- Wadhwa PD, **Culhane JF**, Rauh, VA, Barve SS, Hogan VK, Sandman CA, Hobel CJ, Dunkel-Schetter C, Garite ZTJ, Glynn L. Stress, infection and preterm birth: A biobehavioral perspective. *Pediatric and Perinatal Epidemiology*, 2001; 15 suppl 2: 17-29.

- Wadhwa PD, **Culhane JF**, Rauh VA, Barve SS. Stress and Preterm. Birth: Neuroendocrine, immune-inflammatory and vascular mechanisms. *Maternal and Child Health Journal*, 2001; 5(2): 119-25.
- Culhane JF**, Rauh VA, McCollum K, Hogan VK, Agnew K, Wadhwa P. Maternal stress is associated with bacterial vaginosis in human pregnancy. *Maternal Child Health Journal*, 2001 June; 5(2): 127-34.
- Culhane JF**, Rauh VA, Elo, IT, McCollum KF, Hogan V. Exposure to chronic stress and ethnic differences in rates of bacterial vaginosis among pregnant women. *American Journal of Obstetrics and Gynecology*, 2002 Nov.; 187(5): 1272-1276.
- Webb D, **Culhane JF**. Hospital variation in episiotomy use and the risk of severe perineal trauma during childbirth. *Birth*, 2002 June; 29(2): 132-6.
- Webb D, **Culhane JF**. Time of day variation in rates of obstetrical interventions to assist in vaginal deliveries. *Journal of Epidemiology and Community Health*, 2002; 56(8): 577-8.
- Culhane JF**, Webb D, Grim S, Metraux S, Culhane DP. Prevalence of child welfare services involvement among homeless and low-income mothers: A five-year birth cohort study. *Journal of Sociology and Social Welfare*, 2003; 30(3): 79-96.
- Hobel C, **Culhane JF**. Role of psychosocial stress and nutritional stress on pregnancy outcome. *The Journal of Nutrition*, 2003; 133(5 Suppl 2): 1709s-17.
- Webb D, **Culhane JF**, Metraux S, Culhane DP. Prevalence of episodic homelessness among childbearing women in Philadelphia, PA. *American Journal of Public Health*, 2003; 93(11): 1895-6.
- Goldenberg R, **Culhane JF**. Infection as a cause of preterm birth. *Clinics in Perinatology*, 2003; 30(4): 677-700.
- Chung EK, **Culhane JF**, Elo I, Rauh VA, Riley T, Farley McCollum K, Rubio M, Lee H. Maternal depressive symptoms and use of infant health services and safety practices. *Pediatrics*, 2004; 113: e523-529.
- Goldenberg RL, Kirby R, **Culhane JF**. Stillbirth: A Review. *The Journal of Maternal-Fetal & Neonatal Medicine*, 2004; 16(2): 79-94.
- Goldenberg RL, **Culhane JF**. Pre-pregnancy health status and the risk of preterm delivery. *Archives of Pediatric and Adolescent Medicine*, 2005; 159: 89-90
- Culhane JF**, Davide De Santo, Robert L. Goldenberg, Kelly F. McCollum, Felicia King, Secondo Guaschino. Variation in Nugent Score and Leukocyte Count in Vaginal Fluid Collected from Different Sites. *Obstetrics and Gynecology*, 2005; 150: 120-123.
- Pereira L, **Culhane JF**, McCollum KF. Variation in microbiologic profiles among pregnant women with bacterial vaginosis. *American Journal of Obstetrics and Gynecology*, 2005; 193(3): 746-751.
- Culhane JF**, Nyirjesy P, McCollum K, Goldenberg RL, Gelber SE, Cauci S. Variation in vaginal immune parameters and microbial hydrolytic enzymes in bacterial vaginosis positive pregnant women with and without *Mobiluncus* species
- Culhane JF**, Elo IT Neighborhood context and reproductive health. *American Journal of Obstetrics and Gynecology*, 2005; (192) s22-9.
- Lee H, Rubio MR, Elo IT, McCollum KF, Chung E, **Culhane, JF**. Factors associated with intention to breastfeed among low-income, inner-city pregnant women. *Maternal Child Health Journal*, 2005; 9(3): 253-261.
- duPont NC, Wang K, Wadhwa P, Nelson E, **Culhane JF**. Validation and comparison of luminex multiplex cytokine analysis kits with ELISA: determination of a panel of nine cytokines in clinical sample culture supernatants. *Journal of Reproductive Immunology*, 2005; 66(2): 175-91.
- Goldenberg RL, **Culhane JF**, Johnson D. Maternal Infection and Adverse Fetal and Neonatal Outcomes, *Clinical Perinatology*, 2005; 32(2): 523-559.
- Castrucci BC, **Culhane JF**, McCollum KF, Chung E, Bennett I, Smoking in Pregnancy: Patient and provider risk reduction behavior. *Journal of Public Health Management and Practice*, 2006; 12(1): 68-76.

- Chung EK, McCollum KF, Elo IT, **Culhane JF**. Factors associated with leaving community-based health centers and using other sites for infant primary care. *Ambulatory Pediatrics*, 2006; 6(1): 25-31.
- Bennett IM, **Culhane JF**, McCollum K. Unintended repeat pregnancy and low educational status: Any role for depression and contraception use? *American Journal of Obstetrics and Gynecology*, 2006; 194(3): 749-754.
- Lu MC, Kotelchuck M, **Culhane JF**, Hobel CJ, Klerman LV, Thorp JM Jr. Preconception Care Between Pregnancies: The content of internatal care. *Maternal Child Health J*. 2006; Volume 10(5s).
- Culhane JF**, Nyirjesy P, McCollum K, Goldenberg RL, Gelber SE, Cauci S. Variation in vaginal immune parameters and microbial hydrolytic enzymes in bacterial vaginosis positive pregnant women with and without mobiluncus species. *American Journal of Obstetrics and Gynecology*, 2006; 195(2): 516-21.
- Messer LC, Kaufman JS, Laraia, BA, Eyster J, Holzman C, **Culhane JF**, Elo, I, Burke JG, O'Campo P. The development of a standardized neighborhood deprivation index. *Journal of Urban Health*, 2006; Sep 21; 83(6): 1041-1062.
- Nyirjesy P, Peyton C, Weitz V, Mathew L, **Culhane JF**. Causes of chronic vaginitis: Analysis of a prospective database of affected women. *Obstetrics and Gynecology*, 2006; 108(5) 1185-1191.
- Goldenberg RL, **Culhane JF**. Preterm birth and periodontal disease. *New England Journal of Medicine*, 2006; 355: 18-19.
- Culhane JF**, Rauh VR, Goldenberg RL. Stress, bacterial vaginosis and the role of immune processes. *Current Infectious Disease Reports*, 2006; 8(6): 459-464.
- Cauci S, **Culhane JF**. Modulation of vaginal immune response among pregnant women with bacterial vaginosis by *Trichomonas vaginalis*, *Chlamydia trachomatis*, *Nesisseria gonorrhoeae*, and yeast. *American Journal of Obstetrics and Gynecology*, 2007;
- Goldenberg RL, **Culhane JF**. Low birth weight in the United States. *American Journal of Clinical Nutrition*, 2007; 85(2): 584S-590S.
- Banda Y, Chapman V, Goldenberg RL, Stringer JSA, **Culhane JF**, Sinkala M, Wermund SH, Chi BH. Use of traditional medicine among pregnant women in Lusaka, Zambia. *Journal of Alternative and Complementary Medicine*, 2007; 13(1): 123-128.
- Lee H, Elo IT, McCollum KF, **Culhane JF**. Racial/ethnic differences in breastfeeding initiation and duration among low-income, inner-city mothers. *Social Science Quarterly*, in press.
- Bennett IM, **Culhane JF**, McCollum KF, Mathew L, Elo IT. Literacy and depressive symptomatology in pregnancy among Latinas with limited English proficiency. *American Journal of Orthopsychiatry*, in press.
- Chung EK, Miller RL, Wilson MT, McGeady SJ, **Culhane JF**. Antenatal exposure, neonatal cytokines and pediatric atopic disease. *The Journal of Pediatrics*, in press.
- Hogan VK, **Culhane JF**, Rauh VA, McCollum KF, Agnew KJ, Hitti J. Relative Performance of Three Methods for Diagnosing Bacterial Vaginosis During Pregnancy. *Maternal and Child Health Journal*, in press.

UNDER REVIEW:

- Castrucci BC, **Culhane JF**, McCollum KF, Chung E, Elo I. Low income women who spontaneous quit smoking during pregnancy and maintain abstinence after delivery. *Journal of Epidemiology and Community Health*, under review.
- Bennett I, **Culhane JF**, Elo I. Educational attainment and unplanned repeat pregnancy: The role of depression and contraception. *American Journal of Orthopsychiatry*, under review.
- Cauci S, Casabellata G, McCollum K, **Culhane JF**. Among pregnant women with bacterial vaginosis the hydrolytic enzymes, sialidase and prolidase are positively associated with interleukin-1beta. *Journal of Infectious Disease*, under review.

- Webb DA, Robbins JM, **Culhane JF**, Elo IT. Estimating Neighborhood-Level Obesity Risk: The Value of Maternal Height and Weight Data Available from Birth Certificate Records. *Maternal and Child Health Journal*, under review.
- Chung EK, McCollum KF, Mathew L, Elo IT, **Culhane JF**. Continuous Source of care among young underserved children: Associated characteristics and parenting practices. *Ambulatory Pediatrics*, under review.
- McNellis M, **Culhane JF**, Goldenberg RL. Preterm delivery prediction using ensembles of neural networks, under review.
- O'Campo P, Burke JG, **Culhane JF**, Elo IT, Eyster J, Holzman C, Messer LC, Kaufman JS, Laraia BA. Neighborhood deprivation and preterm birth among non-Hispanic black and white women in eight geographic areas in the United States. *American Journal of Epidemiology*, submitted.
- Culhane JF**, Nyirjesy P, McCollum K, Casabellata G, DiSantolo M, Cauci S. Evaluation of semen detection in vaginal secretions: Comparison of four methods. *Sexually Transmitted Diseases*, submitted.
- Cauci S, Di Santolo M, **Culhane JF**, Stel G, Dolci A, Gonano F, Guaschino S. Oral contraceptive use increases high-sensitivity c-reactive protein but not homocysteine in young healthy women, submitted.
- Goldenberg RL, **Culhane JF**, Iams J, Romano R. The epidemiology of preterm birth. *Lancet*, submitted.
- Iams JD, Romano R, Culhane JF, **Goldenberg RL**. Maternal interventions to prevent preterm birth and improve neonatal outcomes. *Lancet*, submitted.

IN PROGRESS:

- Culhane JF**, McCollum KF, Chung E, Elo I, Lee H. Maternal Depression and Poor Birth Outcomes in Low-Income Urban Women. *American Journal of Epidemiology*. In progress.
- Elo IT, Mykyta L, **Culhane JF**. Paternal support and father-child contact: evidence from a low-income, Inner-City Population. *Journal of Marriage and the Family*. In progress.
- Culhane JF**, Nyirjesy P, McCollum K, Casabellata G, Cauci S. Evaluation of Semen Contamination of Vaginal Secretions: Are Current Methods Missing the Boat? *Obstetrics and Gynecology*, In progress.

BOOK CHAPTERS

- Rauh VA Perera F, **Culhane JF**. In (David Bellinger, Ed) Human Developmental Neurotoxicology. Chapter 19, Incorporating the Social-Ecological Perspective into Studies of Neurodevelopmental Toxicity. Taylor and Francis Group, New York: 393-414, 2006.

PUBLISHED ABSTRACTS

- Chong E, Greenspan JS, Kirkby S, **Culhane J**, Dysart K. Changing Use of Surfactant Over 6 Years and its Relationship to Chronic Lung Disease, Society for Pediatric Research, 2007, San Francisco.
- McGovern A, Kirkby S, Greenspan JS, **Culhane J**, Webb D, Dysart K. The impact of the 5-minute Apgar Score on Infants < 1000 grams, Society for Pediatric Research, 2007, San Francisco.
- Dysart K, Kirkby S, **Culhane J**, Miller T, Greenspan JS. The Use of Systemic Corticosteroids in Infants <1000 grams, Society for Pediatric Research, 2007, San Francisco.
- Kirkby S, Turenne W, **Culhane J**, Webb D, Adeniyi-Jones S. Complication Rates for Moderate Preterm Infants Born Small for Gestational Age, Society for Pediatric Research, 2007, San Francisco.
- Adeniyi-Jones S, Webb D, Kirkby S, **Culhane J**, Greenspan JS. Does Health Insurance Status influence Discharge Care for Preterm Infants with Bronchopulmonary Dysplasia? Society for Pediatric Research, 2007, San Francisco.

- Culhane JF**, Nyirjesy P, McCollum K, Casabellata G, Cauci S. Determination of Semen Contamination of Vaginal Secretions: Comparison of Four Different Methods. Poster presentation. Annual Meeting of the Infectious Diseases Society for Obstetrics and Gynecology, 2006, Monterey, California.
- Duncan GD, Adeniyi-Jones S, Kirkby S, Webb D, **Culhane JF**, Greenspan JS, Health Insurance Status and Neonatal Outcomes in Preterm Infants. Society for Pediatric Research, 2006, San Francisco.
- Duncan GD, Adeniyi-Jones S, Kirkby S, Webb D, **Culhane JF**, Greenspan JS, Are Care Processes for Preterm Neonates Influenced by Health Insurance Status? Society for Pediatric Research, 2006, San Francisco.
- McGovern AM, Shobhana D, Greenspan J, **Culhane J**, Webb D, Kirby S, Risk Profile During the Early Neonatal Period for Developing Severe Retinopathy of Prematurity (ROP) in the Very Low Birthweight Preterm Infant. Society for Pediatric Research, 2006, San Francisco.
- McGovern AM, Shobhana D, Greenspan JS, **Culhane JF**, Webb D, Kirby S, Impact of Ethnicity on Retinopathy of Prematurity (ROP). Society for Pediatric Research, 2006, San Francisco.
- Cook AG, Greenspan JS, Kirby S, Webb D, **Culhane JF**, Kornhauser M, The Interaction of the Timing of Oral Feed Initiation and the Development of Bronchopulmonary Dysplasia (BPD) in Preterm Infants, Society for Pediatric Research, San Francisco.
- Bennett I, **Culhane JF**, Maternal Depressive Symptomatology Among Non English-Speaking Latinas with Low Literacy in the U.S. Inner City. (poster), The Penn Summit on Global Issues in Women's Health, 2005, Philadelphia, PA.
- Nyirjesy P, Peyton C, Weitz MV, **Culhane JF**. Chronic vaginitis: Initial results from a prospective database. Oral presentation. Annual Meeting of the Infectious Disease Society for Obstetrics and Gynecology, 2005, Chareston, South Carolina.
- Elo, I.T., Mykyta L, and **Culhane JF**.. Paternal Support and Father-Child Contact: Evidence from a Low-Income, Inner-City Population, Annual Meeting of the Population Association of America, 2005, Philadelphia, PA.
- Bennett I, **Culhane JF**, McCollum KF. Unintended repeat pregnancy and low educational status: Any role for depression and contraception use? *Contraception*, September 2005.
- Banda Y, Goldenberg RL, Chapman V, **Culhane JF**, Stringer J. Use of Traditional Medicine Among Pregnant Women in Zambia. *African Journal of Reproductive Health* 2004.
- Culhane JF**, Cauci S, McCollum K, Hitti J. Elevated levels of Vaginal IL-1 beta are positively associated with sialidase, anti-GvH IgA and IL-8 in vaginal fluid of BV positive pregnant women *American Journal of Obstetrics and Gynecology*, 2004 Dec; 191(6): #426.
- Culhane JF**, Elo, I, Hillier A, Smith T, McCollum K. An investigation of the association between three methods of assessing neighborhood-level exposures and risk of preterm birth. *American Journal of Obstetrics and Gynecology*, 2004 Dec; 191(6): #427.
- Castrucci BC, **Culhane JF**, McCollum K. Smoking during pregnancy and relapse following delivery among low income urban women. *American Journal of Obstetrics and Gynecology*, 2004 Dec; 191(6): #438.
- Pereira L, **Culhane JF**, McCollum K. The association between clinical findings and microbiologic profiles among BV + pregnant women *American Journal of Obstetrics and Gynecology*, 2003 Dec; 189(6): S100.
- McCollum K, Chung E, **Culhane JF**. Maternal depressive symptomatology and preterm birth (<35 weeks gestation) among low income women. *American Journal of Obstetrics and Gynecology*, 2003 Dec; 189(6): S159.
- Cauci S, Thorsen P, **Culhane JF**. Comparison of biochemical profiles of vaginal fluid in BV + pregnancy US women versus European women. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 189 (6): S167.
- Culhane JF**, Cauci S, Hitti J, Agnew K, Hogan V. Vaginal fluid sialidase and prolidase activity in BV positive pregnant women varies by race/ethnicity and maternal age. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 185(6): S145.

- Culhane JF**, Rauh VA, Hogan V, McCollum KF, Wadhwa P. Racial/Ethnic differences in BV in pregnancy: the role of individual and contextual –level maternal; stress. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 185(6): S145.
- Culhane JF**, Rauh V, McCollum KF, Greenspan JS, Hogan VK, Agnew K, Wadhwa P. Maternal stress is associated with bacterial vaginosis in human pregnancy. *Pediatr Res* 49: 318A, 2001.
- Culhane JF**, Webb D, Greenspan JS, Grim S, Metraux S, Culhane DP. Prevalence of child welfare services involvement among homeless and low-income mothers: A five-year birth cohort study. *Pediatr Res* 49: 156A, 2001.
- Culhane JF**, Elo IT. Re-conceptualizing risk, measurement and analytic strategies for the study of birth outcomes and infant mortality. Annual Meeting of the American Sociological Association, Washington, DC; 2000.
- Greenspan JS, Webb D, **Culhane JF**. Diagnostic related groups (DRGs) for healthy term newborns: Is there unexplained variation in assignment? *Pediatr Res* 49: 125A, 2001.
- Wadhwa P, **Culhane JF**, Chicz-DeMet A, Barve S, Rauh V, McCollum KF, Hogan V. Maternal stress, endocrine/immune-inflammatory processes and vaginal infection in human pregnancy: preliminary findings. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 185(6): S230.
- Webb D, **Culhane JF**, Greenspan J, Tolosa J. Hospital variation in the incidence of major puerperal infection following delivery by cesarean section. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 185(6): S155.
- Webb D, **Culhane JF**, Tolosa J. Hospital variation in episiotomy use and the risk of severe perineal trauma. *American Journal of Obstetrics and Gynecology*, 2001 Dec; 185(6): S215.
- Webb DA, **Culhane JF**, Tolosa J, Greenspan JS. A population-based study of neonatal morbidity associated with vacuum and forceps deliveries. *Pediatr Res* 49: 310A, 2001.
- Greenspan JS, **Culhane JF**, Webb D, Snyder S. Pennsylvania's "Early" Discharge Legislation: Impact on Maternity Length of Stays and Costs of Hospitalization in Philadelphia. *Pediatr Res* 47: 872, 2000.
- Webb D, **Culhane JF**, Snyder S, Culhane DP, Greenspan JS. The Prevalence of Homelessness Among Childbearing Women in Philadelphia. *Pediatr Res* 47: 944, 2000.
- Webb D & **Culhane JF**. The reproductive health of homeless women in Philadelphia. Annual Meeting of the American Public Health Association, Washington, DC; 1998.
- Webb D, **Culhane JF**, Clampet-Lundquist S. Does Medicaid managed care improve prenatal care utilization and birth outcomes? Annual Meeting of the American Public Health Association, Washington, DC; 1998.

INVITED LECTURES

November 4, 2006, Clinical Research Education Day, University of the Sciences in Philadelphia, PA. *Aware for All*.

October 19 – 21, 2006, 39th African Heritage Studies Association National Conference (AHSA), Tampa, Florida. *Understanding Health and Well-Being in Africa and its Diasporas*.

June 20, 2006, Maternal and Infant Health in Delaware: Bringing Together the Community, Dover Delaware. *Race/Ethnic Disparity in Reproductive Outcomes: Does Neighborhood Context Play a Role*.

February 17, 2006, 14th Annual Western Perinatal Research Meeting, The Banff Centre. *Population Based Efforts to Prevent Preterm Birth*.

October 11, 2005, The Joint Conference on Health, Keynote address, Yakima, Washington.

May 16, 2005, Making Change Happen: Translating Research Into MCH Public Health Practice, Eighteenth Annual National Maternal and Child Health Leadership Conference, University of Illinois at Chicago. *Prematurity Prevention; Which Interventions Work/Don't Work and Reducing Racial and Ethnic Disparities.*

April 13, 2005, Public Health Forum, Boston University School of Public Health. *The Alarming Rise in Preterm Births in America: New Biologic and Neighborhood Explanations and Interventions.*

September 23, 2004, 2004 Maternal-Child Health Update Conference. *The Social Production of Perinatal Risk: Studying Physiology in Social Context.*

April 2, 2004, Population Association of America, Boston, Massachusetts. Child Health in Developed Countries: New Methods and Findings.

February 26, 2004, 2nd Annual Prematurity Symposium March of Dimes Arizona Chapter, Scottsdale, Arizona. *Neighborhood and Personal Stress: Contributors to Preterm Birth?*

April 28, 2003, National Low Income Housing Coalition Housing Policy Conference, Washington, DC. *The Role of Housing in Child Health and Well-Being.*

March 3, 2002, Workgroup on Optimizing Pregnancy Outcomes in Minority Populations, National Institute of Nursing Research, National Institutes of Health, Bethesda, MD. *Psychosocial and Biological Influences on Pregnancy Outcomes: An Integrated Framework.*

December 11, 2002, The Eight Annual Maternal and Child Health Epidemiology Conference, Sand Key, Clearwater Beach, Florida. *Community Social Context and Pregnancy Outcomes in Philadelphia.*

November 5, 2002, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Program Review, Atlanta, GA. *Health Disparities and Vulnerable Populations: Why we Need Partners.*

July 18, 2002, USAID/Welcome Trust Workshop: Nutrition as a Preventive Strategy Against Adverse Maternal Pregnancy Outcomes, Oxford England. *Role of Psychosocial Stress and Nutritional Stress on Poor Pregnancy Outcomes.*

May 30, 2002, Office of Behavioral and Social Sciences Research National Institutes of Health, Community Measures Workshop, Bethesda, MD. *Individual and Contextual Predictors of Maternal Infection and Preterm Delivery.*

April 15, 2002, Secretary's Advisory Committee on Infant Mortality, Washington, DC. *Preterm Birth.*

December 5, 2001, European Society for Infectious Diseases in Obstetrics and Gynecology, Trieste, Italy. *Stress and Bacterial Vaginosis.*

November 30, 2001, Preventing Preterm Delivery: Promising Strategies Conference, Centers for Disease Control and Prevention, Atlanta, GA. *The Social Production of Perinatal Risk: Studying Physiology in Social Context.*

September 24, 2001, Monitoring Maternal and Child Health and Family Planning in the Southeast: Racial Disparities and Birth Outcomes- The 28th Annual Regional Conference, University of North Carolina at Chapel Hill. *The Influence of Communities and Neighborhoods on Maternal and Child Health.*

September 24, 2000, 3rd World Congress On Stress, Dublin, Ireland. *Stress is Associated with Bacterial Vaginosis in Human Pregnancy.*

ACTIVE GRANTS

1R03MH074750-01

09/15/05-06/30/07

Culhane (Co-PI)

NIH/NIMH

Obstacles to Maternal Depression Care Among Women with Low Literacy. This grant is a qualitative addition to a larger quantitative intervention study of women who have had a preterm birth. The role of low literacy among women with major depression will be studied to examine the relationship between patient attitudes to utilization of free depression care. It adopts a mixed quantitative/qualitative methodology.

RFP/Contract Number NIH-NICHD NO1-HD-5-3414

(2004-07)

The National Children's Study: The Chop/Drexel Vanguard Site: 9/30/05-12/31/10 30%

PI's (Drexel-Culhane; CHOP – Schwarz) \$12,204,504

This contract is one of six awarded nationally to conduct the first data collection for the National Children's Study (NCS). The NCS is a prospective cohort study of 100,000 children enrolled in the preconception or prenatal period and followed through 21 years of age. Dr. Culhane and Schwarz will collectively run the Montgomery County PA site where 1,250 participants will be recruited. This project is designed to explore the many exposures, and their complex interactions, associated with growth and development.

Pennsylvania State Department of health Center of Excellence for research on Pregnancy

Outcomes RFA (02-07-20)

The Philadelphia Collaborative Preterm prevention Project: 6/01/04- 5/30-08 40%

Principle Investigator (Culhane) \$4,899,644

This project is a large prospective randomized trial aimed at reducing repeat preterm births in Philadelphia women who just experienced a preterm birth at < 34 weeks GA. By targeting a wide variety of risk factors for preterm birth including identification and treatment of infections, smoking, stress, depression, and abnormal weight (too high or too low) and by delaying repeat pregnancy, we believe we can reduce the repeat preterm birth rate. In addition to their direct effect on risk of preterm birth, we hypothesize that these seemingly disparate yet well-known risk conditions lead to PTB through a common physiological mechanism, increase in systemic inflammation. We are testing the hypothesis that reducing inflammation prior to pregnancy will reduce the likelihood of a repeat preterm birth. This research is novel because it is focusing on an extremely high-risk group in the interconceptional period, using a multi risk factor reduction approach and because we are testing a novel biological pathway.

Reproductive Health Earmarks, Grant No. H75/CCH324848-01, from the Centers for Disease Control and Prevention

7/10/05-9/9/06 10%

Principle Investigator (Culhane) \$297,600

This Congressional appropriation funds the development of a quality benchmarking data base for antenatal and obstetric care. During this year of funding a scientific advisory board will develop the quality measures for pregnancy and labor and delivery. The *Peri-Trak* system will mirroring the Vermont Oxford Network, a quality benchmarking system for neonatal intensive care.

02-MCHB-33A (DHS/HRSA) **9/30/02 – 9/30/07** **10%**
Principal Investigator (Culhane) \$ 99,000 per year
Targeting Programs for Reducing Racial, Ethnic and Geographical Health Disparities
The objective of this project is to employ multi-level modeling techniques to examine various socio-environmental influences—including access to grocery stores and restaurants, directly observed neighborhood conditions and resources and crime rates—and individual characteristics and behaviors that may influence preterm birth.

PRIOR GRANTS

1R21HD43758-01 (NICHD) **9/01/02 – 8/31/03** \$198,125
Principal Investigator (J. Fantuzzo, University of Pennsylvania)
Co-I
Evidence-based Program for the Integration of Curricula

TS286-1414 (ATPM /CDC) **10/01/98 - 9/30/01** \$1,100,000
PI Culhane/Rauh
Preterm Birth Among Inner City Women-BV: Stressors & Race

March of Dimes, Pennsylvania Chapter Community Grant
Principal Investigator (Culhane) **10/1/04- 9/30/05** \$25,000

Rethinking Prenatal Services: Implementing Group Care with an Emphasis on the Social Determinants of Health

TS 312-15/15 (ATPM/CDC) **09/01/00-08/03/05** \$1,615,093
Principal Investigator (Culhane)
Biologic Pathways Linking Stress, BV and Preterm Birth

ROID36462-01A I (NICH/NICHD) **10/01/99-09/31/05** \$2,444,616
(Principal Investigator: Elo)
Co-Principal Investigator (Culhane)
Racial and Neighborhood Disparities in Infant Health

TS-0626 (ATPM/CDC) **10/1/01-9/30/06** \$805,246
Principal Investigator (Culhane)
Preterm Birth and Race: A Study of Individual and Spatial Effects

TS-0561 (ATPM/CDC) **10/1/01- 9/30/05** \$1,253,458
Principal Investigator (Culhane)
Microbial and Immune Parameters Associated with Prematurity