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## OUR MISSION

The Division of Clinical Research (DCR), Department of Obstetrics and Gynecology at Washington University School of Medicine provides specialized facilities and services to support clinical research in women's reproductive health.

Our mission is to foster collaborative, multidisciplinary research aimed at improving women's health.

## Washington University in St. Louis

### SCHOOL OF MEDICINE

## Research in the Department of Obstetrics and Gynecology at Washington University in St. Louis Reaches \$7 Million

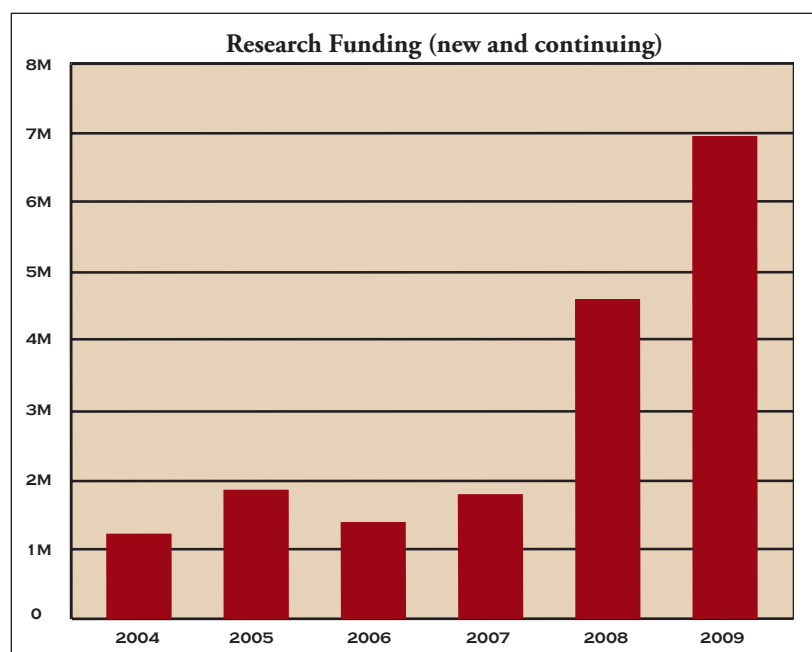
Welcome to the Spring 2010 issue of The Current, the newsletter for the Department of OB/GYN, Division of Clinical Research (DCR). Over the last year, the number of research studies within the Department has shown a marked increase. The department has been awarded several grants from various funding sources including the NIH, BJH foundation, private foundations, and industry sponsors.

The Department of Obstetrics and Gynecology is immersed in a tradition of outstanding patient care and solid clinical research investigation, beginning in 1929 when Dr. Willard Allen first identified and isolated progesterone in the corpus luteum.

"Dr. Allen's mission continues today through

the various funding opportunities made possible by the collaboration of a talented, research-driven team," stated Dr. Jeffrey Peipert, Vice Chair of Clinical Research.

The DCR provides support services from research design, and patient recruitment to data analysis with the goal of continuing to improve women's health. The Washington University School of Medicine is one of the finest academic medical schools in the country, striving to achieve excellence in the areas of clinical care, education, and research. Together, we remain one of the best institutions in the country.



## Research Staff Highlights

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**Jenifer Allsworth, PhD**

*Epidemiologist, Assistant Professor,  
Department of Obstetrics and Gynecology,  
Division of Clinical Research,  
Washington University School of Medicine*

**Societies, Memberships, and Honors:**

Society for Epidemiologic Research

Dr. Allsworth joined the faculty at Washington University in 2006 as an epidemiologist in the Department of Obstetrics and Gynecology. She received her PhD at Brown University where she trained as a reproductive and social epidemiologist. Her research focuses on women's reproductive health, particularly bacterial vaginosis and sexually transmitted infections. Through this research she seeks to elucidate biologic mechanisms and genetic susceptibility of health disparities. Dr. Allsworth is currently a KL2 Career Development Award Scholar and a member of the Society for Epidemiologic Research.

Dr. Allsworth has been an investigator on multiple large-scale populations based epidemiologic studies in women's health. These include: the Study of Women's Health Across the Nation (SWAN), a multi-ethnic study that is a longitudinal study of women's health during the menopausal transition; Project PROTECT, a staged-matched intervention study to improve dual method contraceptive use; and The Contraceptive CHOICE Project, a prospective cohort study of 10,000 St. Louis women. CHOICE was developed to promote the use of long-acting methods in the St. Louis region. The primary objectives of the Project are to provide no-cost contraception to a large number of women in the St. Louis region, promote the use of long-acting reversible contraception (LARC), and assess contraceptive continuation and satisfaction.

Dr. Allsworth is also the Principal Investigator of the VAST Study, a CHOICE substudy that is examining the role of genomic variation in human leukocyte antigens in sexually transmitted infection susceptibility.

Dr. Allsworth is an avid animal lover and enjoys caring for her two dogs Sophie and Cooper. In her spare time she also enjoys whale watching, traveling, nature photography, and spending time with friends and family.

*Questions or Comments?  
Feel free to contact  
Teresa Bieg at:  
biegt@wudosis.wustl.edu*

*Special thanks to all those  
who made this newsletter  
possible. Your hard work  
is appreciated!*

- Monica Anderson
- Teresa Bieg
- Carrie Bower
- Kim Delli-Zotti
- Danielle Frueh
- Laura Hanneken
- Sarah Heintzman
- Christine Kramer
- Lynne Lippmann
- Molly Meyer
- Jenny Mullersman
- Linda Odibo
- Jeffrey Peipert

## New Faces

Welcome to all of our newest staff members.

Jennifer Biggs  
*Research Assistant*

Carrie Bower  
*Research Assistant*

Emily Corcoran  
*Research Assistant*

Tiara Hopson  
*Research Assistant*

Kay Kerwin  
*Patient Services Representative*

Michele Landeau  
*Research Assistant*

Maria Marin  
*Research Assistant*

Kristen Massey  
*Research Assistant*

Jennifer McElfresh  
*Nurse Practitioner*

Molly Meyer  
*Research Assistant*

Heidi Monk  
*Data Assistant*

Kristen Powers  
*Research Assistant*



### **Premal H. Thaker, MD, MS**

*Assistant Professor, Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, Washington University School of Medicine*

Dr. Thaker earned her undergraduate degree from Villanova University, and her medical degree from Allegheny University-Medical College of Pennsylvania via a competitive six-year combined Bachelor's and Medical Degree program. She completed her residency training in obstetrics and gynecology at the University of Pennsylvania Medical Center. She completed

a fellowship in gynecologic oncology at M.D. Anderson Cancer Center in Houston, Texas. During this fellowship, Dr. Thaker earned a Master of Science degree in Cancer Biology as part of a NIH-sponsored T32 grant.

Dr. Thaker's clinical interests include fertility-sparing oncologic surgery, minimally invasive and robotic surgery for gynecologic malignancies, critical care gynecology, and novel therapeutics for treatment of gynecologic cancers.

Dr. Thaker's research interests involve the better understanding of neuroendocrine pathways of ovarian cancer growth and progression. As a fellow, Dr. Thaker and colleagues published a study in *Nature Medicine* demonstrating that stress hormones can have direct effects such as increased angiogenesis, tumor growth, and metastasis on ovarian cancer cells via beta-adrenergic receptors in an orthotopic mouse model. Based on this preclinical work, she is conducting a clinical trial associated with a Gynecologic Cancer Foundation Grant sponsored by St. Louis Ovarian Cancer Awareness.

Additionally, she has a collaborative NIH sponsored RO1 grant to evaluate pathways by which biobehavioral factors such as depression and social support influence tumor-associated macrophages in ovarian cancer patients. With a better understanding of the effects of biobehavioral factors on ovarian cancer biology, Dr. Thaker and her collaborators will continue to develop novel therapeutic interventions.

As a clinical principal investigator on project #4 of Washington University's Specialized Program of Research Excellence in endometrial cancer, she and colleagues are characterizing the relationship between the extracellular signal-regulated kinase pathway and the development and treatment of endometrial cancer. Dr. Thaker is establishing an orthotopic murine endometrial cancer model to test the emerging therapeutic agents. Currently, she serves as co-investigator for a Gynecologic Oncology Group phase II clinical trial utilizing a MEK inhibitor in recurrent or persistent endometrial cancer based on this work.

Dr. Thaker has a busy clinical practice which serves as an inspiration for her research. Additionally, she enjoys traveling to historical destinations and catching up with friends and family.

# What's Happening at the DCR

The DCR is rapidly growing! Below is a list of current studies conducted within the Division.

## OBSTETRICS

### BLADDER FLAP STUDY

*PI: Methodius Tuuli, MD, MPH • CRNC: Patty Fogerty, RN, MSN*

A randomized controlled trial to evaluate the effects of omitting the bladder flap creation at cesarean section. A total of 348 patients over 34-weeks gestation undergoing a primary or repeat non-emergent cesarean section will be enrolled.

### DIABETES STUDY

*PI: Alison Cahill, MD, MSCI • CRNC: Mary Koenig, RN*

Sponsored by a Thrasher Grant

A prospective study aimed at assessing optimal predictors of fetal macrosomia, birth trauma, or combined neonatal morbidity outcomes in diabetic pregnant women. Recruitment occurs in the ante-partum clinic, BJH and CAM. A total of 340 pregnant women will be enrolled over a four-year period.

### ELECTRONIC FETAL MONITORING STUDY

*PI: Alison Cahill, MD, MSCI • CRNC: Carla Chung RN; BSN, Danielle Frueh, RN, BSN • RA: Laura Hanneken*

Sponsored by a Robert Wood Johnson Grant

A retrospective cohort study aimed at identifying which characteristics of fetal heart rate decelerations are associated with fetal acidemia at delivery. This is done by quantitatively analyzing electronic EFM recordings in the second stage of labor, and comparing these characteristics between women who deliver an infant with an umbilical cord pH  $\leq 7.10$  to those with a cord pH  $> 7.10$ . A total of 5,000 charts will be reviewed over a three-year period.

### IUGR STUDY

*PI: Anthony Odibo, MD, MSCE • CRNC: Linda Odibo, RN, BSc*

A prospective cohort study aimed at comparing the ability of two antepartum tests, (Doppler flow studies of fetoplacental vessels and biophysical profile), to optimally determine the timing of delivery of preterm intrauterine growth-restriction pregnancies. Recruitment occurs in the Obstetric Ultrasound Department, BJH and Missouri Baptist Medical Center. A total of 318 pregnant women will be enrolled.

### OCCULT INFECTIONS AND PRETERM DELIVERY

*PI: Indira Mysorekar, PhD • RT: Rebecca Gunkel • RA: Carolyn Bower*

Sponsored by Burroughs Wellcome

A prospective study aimed at determining which pathogenic bacteria are present as occult, intracellular reservoirs in endometrial/placental tissues in women with preterm birth and to evaluate whether pre-existing infection disrupts placental development. Recruitment will occur on Labor and Delivery at BJH.

### PREDICTING NEONATAL ACIDEMIA AND NEUROLOGIC INJURY WITH INTRAPARTUM FETAL HEART RATE MONITORING

*PI: Alison Cahill, MD, MSCI • CRNC: Carla Chung, RN, BSN; Danielle Frueh, RN, BSN; Monica Anderson, RN, BSN • RA: Laura Hanneken*

Sponsored by an NIH RO1 grant

A prospective study aimed at determining which fetal heart rate deceleration characteristics, are associated with an infant umbilical cord arterial pH  $\leq 7.10$ , if characteristics of fetal heart rate decelerations, have the same association with metabolic acidemia, respiratory acidemia or mixed acidemia and if characteristics of fetal heart rate decelerations, have the same predictive ability for infant umbilical cord arterial pH  $\leq 7.10$  in three subgroups of patients with higher prevalence of acidemia (chorioamnionitis, preeclampsia, IUGR). The study also aims to develop and validate a clinical predictive index to identify specific fetuses at high risk for acidemia based on characteristics of EFM recordings. Recruitment will occur at Barnes-Jewish Hospital with a total of 7,150 mothers and 200 babies over a five-year period.



## **PLACENTAL FUNCTION STUDY**

*PI: Methodius Tuuli, MD, MPH • CRNC: Linda Odibo, RN, BSc*

This is a prospective cohort study of pregnant women between 18-22 weeks gestation who are undergoing their second trimester fetal anatomy scan. The study aims to determine if a single parameter of placental structure, blood flow, or analyte secretion in the second trimester predicts sub-optimal pregnancy outcome and to determine if combination of first trimester and second trimester placental assessment and analyte secretion improve the predicative value of the model to predict adverse pregnancy outcome. A total of 1,500 women will be recruited from the Obstetric Ultrasound Department at BJH over a two-year period.

## **PLACENTAL STUDY**

*PI: Donald Michael Nelson, MD, PhD; Phyllis Huettner, MD*

A retrospective study of women who have died during pregnancy to determine if syncytial knots are released into the maternal systemic circulation and can therefore be identified in the lungs of women who die during pregnancy.

## **PREDICTING ADVERSE PREGNANCY OUTCOMES**

*PI: Anthony Odibo, MD, MSCE • CRNC: Linda Odibo, RN, BSc*

This is a prospective cohort study of pregnant women between 11-14 weeks gestation undergoing their first trimester aneuploidy scan. The aim of the study is to determine if a single parameter of placental structure, blood flow, or analyte secretion predicts sub-optimal pregnancy outcome. The study includes doppler evaluation of uterine arteries, assessment of placental volume, maternal serum for free beta-hCG and PAPP-A, with the addition of ADAM12s levels. A total of 1,500 women will be recruited from the Obstetric Ultrasound Department at BJH over a two-year period.

## **PROGESTERONE STUDY**

*PI: George Macones, MD, MSCE • CRNC: Julie Statzel, RN, BSN*

Sponsored by Hologic

A prospective placebo controlled study aimed at determining if weekly injections from 16 weeks gestation of 17P given intramuscularly weekly will reduce the incidence of preterm labor in women with a history of a previous preterm delivery. Recruitment will occur in the ante-partum clinic, and the CAM. A total of 20 women will be enrolled at this site.

## **PROGESTERONE/SHORT CERVIX STUDY**

*PI: Anthony Odibo, MD, MSCE • CRNC: Linda Odibo, RN, BSc*

Sponsored by Columbia Laboratories Inc

An international multi-centered, randomized controlled trial aiming to reduce the risk of pre-term delivery in pregnant women at increased risk of pre-term delivery due to a short cervical length. Randomization would be to either a placebo or Prochieve® (progesterone), gel given vaginally. Recruitment will occur in the Obstetric Ultrasound Department. A total of 30 pregnant women will be enrolled at Washington University (300 in total).

## **TWIN BIRTH STUDY**

*PI: George Macones, MD, MSCE • CRNC: Linda Odibo, RN, BSc*

Sponsored by a Canadian Institutes of Health Grant

A multi-centered, international randomized controlled trial to determine the optimal delivery management for twin pregnancies between 32-38 weeks gestation where Twin A is vertex, in order to reduce maternal and fetal/neonatal mortality and morbidity comparing planned caesarean section with planned vaginal birth for twins at 32-38 weeks gestation. A multi-centered, international study coordinated by the Centre for Mother, Infant and Child Research, Toronto, Canada. The study Recruitment will occur in the ante-partum clinics, BJH. A total of 24 pregnant women will be enrolled over a five-year period.

## **THE ST. LOUIS NEONATAL GUT MICROBIOME INITIATIVE**

*PI: Barbara Warner, MD • CRC: Christine Kramer*

Sponsored by the Children's Discovery Institute of St. Louis Children's Hospital

A twin birth cohort study aimed at testing the relative roles of host genotype versus early environmental exposures (mother, diet, etc) on gut microbial ecology. This will compare how similar the microbial community is for identical twins to non-identical twins in the first year of life. Recruitment will occur at Center for Advanced Medicine, Labor and Delivery at BJC, and Missouri Baptist Hospital. The study aims to enroll 100 mothers and 25 monozygotic twin pregnancies over 34-weeks gestation.

## **VITAMIN D STUDY**

(Vitamin D Antenatal Asthma Reduction Trial (VDAART))

*PI: Robert Strunk, MD • CRNC: Monica Anderson, RN, BSN; Danae Larson, RN, BSN • RPC: Jennifer Byers, Yvonne Burrage*

Sponsored by a NIH Grant

A multi-centered randomized double blind controlled trial to determine whether sufficient vitamin D supplementation in the pregnant mother is associated with reduced incidence of asthma in the child during the first three-years of life. Our primary outcomes will be doctor's diagnosis of asthma and/or recurrent wheeze in the child at age three-years. A total of 290 patients at Washington University will be recruited over two years.

## **GYNECOLOGY**

### **BACTERIAL VAGINOSIS AND INDUCED ABORTION**

*PI: Tessa Madden, MD • CRNC: Danae Larson, RN, BSN*

This research project is a prospective study of the prevalence of bacterial vaginosis in 500 women undergoing medication and surgical abortion. The aim of the study is to collect information about possible risk factors for bacterial vaginosis and determine if there is an association with demographic or behavioral characteristics and the presence of BV in our patient population. About 200 women will join this study at Washington University in St. Louis.

### **THE CONTRACEPTIVE CHOICE PROJECT**

*PI: Jeffery Peipert, MD, PhD • Project Director: Gina Secura, PhD, MPH*

Sponsored by an anonymous foundation

The study aim is to reduce the number of unintended pregnancies in the St. Louis area by providing no cost contraception of a woman's choice for three years, including STD and HIV testing and STD treatment. Recruitment occurs at the Division of Clinical Research, as well as multiple family planning clinics in the St. Louis region. A total of 10,000 women will be enrolled over a four-year period with follow-up for three-years after enrollment.

### **THE CONTRACEPTIVE CHOICE DECISION MAKING TOOL**

*PI: Tessa Madden, MD • Project Director: Gina Secura, PhD, MPH*

Sponsored by a Society of Family Planning (SFP) Grant

The aim of this study is to conduct the formative research necessary to develop a computerized decision-making tool that incorporates the social and cultural factors that influence women's contraceptive decisions; and therefore increase satisfaction, knowledge, and decision certainty with the contraceptive decision-making process. Through focus groups, surveys and initial assessments among women and clinicians, a web-based interactive computerized tool will be developed and pilot tested among participants of the Contraceptive CHOICE Project.

### **INCIDENT SEXUALLY TRANSMITTED INFECTION, RACE, BACTERIAL VAGINOSIS AND HUMAN LEUKOCYTE ANTIGENS STUDY**

*PI: Jenifer Allsworth, PhD • CRNC: Danae Larson, RN, BSN; Linda Odibo, RN, BSc*

The study is a nested case-control study within a prospective cohort study. The aim of the study is to estimate the prevalence of HLA alleles and haplotypes, their association with susceptibility to sexually transmitted infections and interactions with race/ethnicity and other vaginal conditions (bacterial vaginosis). It will take place in connection with The Contraceptive CHOICE Project. The study plans to recruit 180 participants and follow them for 12 months.

## **IUD STUDY**

*PI: David Eisenberg, MD, MPH • RA: Kristen Powers*

Sponsored by Medicine 360

A Phase III, multi-center, randomized study aimed at evaluating whether the safety and effectiveness of LNG 20 intrauterine contraceptive system compared to the Mirena. A total of 150 women will be recruited at the Division of Clinical Research.

## **OVARIAN RESERVE AND JUVENILE/ADULT RHEUMATOID ARTHRITIS STUDY**

*PI: Amber R. Cooper, MD • CRNC: Mary Koenig, RN*

Sample analysis supported by Beckman Coulter, Inc.

This is a prospective study aimed at evaluating ovarian reserve in females 4-50 years of age with the diagnosis of RA or JRA/JIA. The purpose is to evaluate the effects of disease severity and biologic/cytotoxic therapies on ovarian function. Recruitment of patients is at SLCH and the Rheumatology Clinic at the CAM. Recruitment began in December, 2008 and will continue until 300 patients are enrolled.

## **REPRODUCTIVE OUTCOMES IN OBESE WOMEN WITH INFERTILITY STUDY**

*PI: Emily Jungheim, MD • CRNC: Amy Bass, RN, BSN*

A prospective cohort study of obese versus non-obese women undergoing in-vitro fertilization with the objective to study potential contributions of leptin, and adiponectin to poor reproductive outcomes among obese women. Recruitment will occur in the Department of Reproductive Endocrinology and Infertility. Approximately 450 IVF cycles and seven patients will be recruited from each group.

## **THE VAST STUDY**

*PI: Jenifer Allsworth, PhD • CRNC: Danae Larson, RN, BSN; Linda Odibo, RN, BSc • RA: Molly Meyer*

A prospective cohort study nested within the Contraceptive CHOICE Project that seeks to evaluate the role of genomic variation in Human Leukocyte Antigens in susceptibility to bacterial sexually transmitted infections (Chlamydia Trachomatis and Neisseria Gonorrhoeae). A total of 1,000 women between the ages of 18 and 45 years will be recruited.

## **VITAMIN D AND VAGINAL FLORA**

*PI: Jenifer Allsworth, PhD*

A substudy of the Vitamin D Antenatal Asthma Reduction Trial that will evaluate the impact of Vitamin D supplementation during pregnancy on vaginal flora. Up to 150 women will be recruited.

## **WEIGHT CHANGE AND CONTRACEPTION STUDY**

*PI: Zevidah Vickery, MD*

As a sub-study of The Contraceptive CHOICE Project, the study's goal is to measure the change in body weight, body mass index (BMI), and body composition measured by dual-energy x-ray (DXA) technology between baseline and 12 months in women who are using either the Etonorgestrel Subdermal Implant or Levonorgestrel Intrauterine Contraception. The study will compare these measures to those using the copper IUC. Appetite and activity changes during this time period will also be assessed. Enrollment begins in April and will continue until 75 participants in each group are enrolled.

## **WHSC “WOMEN’S HEALTH SPECIMEN CONSORTIUM” STUDY**

*PI: Ann Gronowski, PhD; Kelle Moley, MD; Jenifer Allsworth, PhD • CRC: Christine Kramer*

Sponsored by an ICTS Collaborative Research Grant

The study aim is to create a structure to facilitate the collection of patient specimens for women's health research. The bank will provide specimen collection, specimen storage and processing, as well as the maintenance of a comprehensive database of outcomes data for five hypothesis driven projects in the first year. This process will be completed by working together with the ICTS's Translational Pathology and Molecular Phenotyping (TPMP) core. Recruitment will occur at Washington University Infertility and Reproductive Medicine Center and the Center for Advanced Medicine. Approximately 360 women will be enrolled in the first year.

**Trial of Intravenous Paclitaxel, Intraperitoneal Carboplatin and Intraperitoneal Paclitaxel or Intravenous Docetaxel, Intraperitoneal Carboplatin and Intraperitoneal Paclitaxel in Patients with Previously Untreated Epithelial Ovarian Carcinoma, Fallopian Tube or Primary Peritoneal Carcinoma**

*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 9916 - Cooperative Group

A Phase I study of IP/IV therapy with/without Bevacizumab for front-line treatment of ovarian, fallopian tube and primary peritoneal cancers. Accrual dependent upon cohorts open. Target accrual: cohort dependent.

**Clinical Trial of Bevacizumab with IV Versus IP Chemotherapy in Ovarian, Fallopian Tube and Primary Peritoneal Carcinoma NCI-Supplied Agent(s): Bevacizumab**

*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 252 - Cooperative Group

A Phase III study of bevacizumab with IV versus IP chemotherapy in women with Stage II or III ovarian, fallopian tube and primary peritoneal carcinoma. Target accrual: 1,250.

**Trial of Pemetrexed and Bevacizumab for Recurrent Ovarian and Primary Peritoneal Carcinoma**

*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Genentech/Eli Lilly, BEV/Alimta - Investigator-Initiated Single Site

A Phase II study of bevacizumab plus pemetrexed (Alimta) in recurrent ovarian or primary peritoneal carcinoma with no more than two prior treatment regimens. Target accrual: 35.

**Nurse-Delivered WRITE Symptoms<sup>®</sup> Vs. Self-Directed WRITE Symptoms<sup>®</sup> Vs. Care as Usual for Optimal Symptom Management for Women with Recurrent Ovarian, Fallopian Tube, or Primary Peritoneal Cancer**

*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 259 - Cooperative Group

Nurse directed WRITE symptoms – this is the first GOG study to come out of the GOG nursing committee and looks at symptom management. Participants are randomized to one of three groups: care as usual, self-directed WRITE symptoms, nurse-delivered WRITE symptoms. This study utilizes web-based questionnaires with patient-reported outcomes assessment for symptom management. Target accrual: 480.

**Randomized Controlled Clinical Trial of Carboplatin and Paclitaxel Alone or in Combination with Bevacizumab (NSC #704865, IND #7921) Followed by Bevacizumab and Secondary Cytoreductive Surgery in Platinum-Sensitive, Recurrent Ovarian, Peritoneal Primary and Fallopian Tube Cancer.**

*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 213 - Cooperative Group

A Phase III study of carboplatin/paclitaxel with/without bevacizumab followed by bevacizumab with/without secondary cytoreduction for women with recurrent, platinum-sensitive ovarian, primary peritoneal or fallopian tube carcinoma. Target accrual: 660.



## GRANTS AWARDED

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### **Gynecologic Cancer Foundation**

**PI: Premal Thaker, MD | Award Period: 1/1/09 to 12/31/10**

This two-year grant will look at the effect of biobehavioral factors such as stress and whether these factors alter how the body responds to chemotherapy in women with ovarian cancer.

**T32HD055172**

**Lorie Harper, MD | Award Period 7/1/09 to 6/30/11**

Reproductive epidemiology training program at Washington University in St. Louis. This is part of the T32 training grant program at Washington University.

**T32HD055172**

**Nora Kizer, MD | Award Period 7/1/09 to 6/30/11**

Reproductive epidemiology training program at Washington University in St. Louis. This is part of the T32 training grant program at Washington University.

### **Gynecologic Oncology Group Grant**

**PI: Rebecca Brooks, MD | Award Period: 8/1/09 to 7/31/11**

The genetic contribution to metastatic disease is well supported, and germline polymorphisms may influence which patients are at risk. The objectives of the study are to evaluate germline polymorphisms in key metastases modifier genes to look for differences between patients with early stage invasive endometrial cancer (Stage IB-IC by the old staging system) compared with those who have nodal metastases at diagnosis (Stage IIIC) which may place them at risk of nodal metastases. A secondary objective is to correlate germline polymorphisms with clinico-pathologic factors such as age of cancer diagnosis, sites of other metastasis and BMI.

### **National Institutes of Health T32**

**PI: George Macones, MD | Award Period: 09/01/09 to 04/30/14**

The primary objective is to prepare qualified individuals for careers that have a significant impact on the health-related research needs of the Nation. This Grant provides the primary means of supporting graduate and postdoctoral research training to help ensure that a diverse and highly trained workforce is available to assume leadership roles related to the Nation's biomedical, behavioral and clinical research agenda.

### **Society of Family Planning Grant**

**PI: Tessa Madden, MD | Award Period: 09/01/09 to 08/31/11**

In this innovative study, scholars will conduct the formative research to develop a computerized decision aid to assist patients with contraceptive decision-making. This tool will incorporate social and cultural factors that influence women's contraceptive decisions with the goal of increasing contraceptive knowledge, satisfaction and decision certainty.

### **Special Project of Research Excellence (SPORE) in Endometrial Cancer**

**PI: Paul Goodfellow, PhD | CO-PI: David Mutch, MD | Award Period: 9/8/09 to 8/31/12**

The major goal is to determine the expressivity and penetrance of DNA mismatch repair gene mutations in families ascertained through endometrial cancer probands, to define the temporal relationship between acquisition of defects in DNA mismatch repair and accumulation of mutations in oncogenes and tumor suppressors in endometrial tumorigenesis, and define how aberrant methylation influences mutation in MSI-positive endometrial cancers.

## GRANTS AWARDED

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### **National Institutes of Health K12**

**PI: George Macones, MD | Award Period: 09/30/09 to 08/31/14**

The five-year grant, from the federal National Institute of Child Health and Human Development (NICHD), establishes the medical school as a Women's Reproductive Health Research (WRHR) Career Development Center. The initiative promotes research that will benefit the health of women. Scholars will expand research on subjects ranging from women's infectious diseases to maternal fetal physiology to endometrial cancer.

### **Burroughs Wellcome Fund**

**PI: Indira Mysorekar, PhD | Award Period: 11/01/09 to 11/30/10**

The Burroughs Wellcome Fund Preterm Birth Initiative was created to increase the understanding of the biological mechanisms underlying parturition and spontaneous preterm birth. In this study, we seek to determine which pathogenic bacteria are present as occult, intracellular reservoirs in endometrial/placental tissues in women with pre-term birth.

### **National Institutes of Health R01**

**PI: Alison Cahill, MD | Award Period: 04/01/10 to 03/31/15**

The R01 provides support for health-related research and development based on the mission of the NIH. Prediction of Fetal Acidemia with Intrapartum Fetal Heart Rate Monitoring, will be examining features of Category II EFM recordings and their ability to predict outcomes. The aim is to incorporate these findings into improving the use of the most commonly utilized instrument, EFM, in obstetrics.

### **RO1 CA140933-01**

**PI: Premal Thaker, MD | Award Period: 07/01/09 to 05/31/14**

Subcontracted with the University of Iowa. This five-year grant will examine biobehavioral influences with the ovarian tumor microenvironment.

### **National Institutes of Health K12**

**PI: Emily Jungheim, MD | Award Period: 01/01/10 to 12/31/10**

Adipokines and Reproductive Outcomes in Obese Women with Infertility. The grant is a career development award granted to the Department of Obstetrics and Gynecology and provides salary support. The WRHR Program was initiated by the NICHD in 1998, through the Reproductive Sciences Branch in response to concerns about the need for greater numbers of obstetrician-gynecologist physician scientists performing research on women's health. There are 20 active WRHR Centers in departments of obstetrics and gynecology throughout the nation with the primary goal of increasing the research capacity of clinically trained obstetricians and gynecologists.

### **BIRCWH 5K12HD001459-10**

**PI: Tessa Madden, MD | Award Period: 07/01/09 to 06/30/10**

The Building Interdisciplinary Research Careers in Women's Health (BIRCWH) Program at Washington University School of Medicine supports the career development of up to five junior faculty members who show exceptional promise for an independent research career that will benefit the health of women.

### **ACOG/Bayer HealthCare Pharmaceuticals Research Award in Long-Term Contraception**

**PI: David Eisenberg, MD, MPH | Award Period: 07/01/10 to 06/30/11**

Immediate postpartum insertion of etonogestrel subdermal implant contraceptive device: impact of bleeding profile. Implanon™ (68mg etonogestrel subdermal contraceptive implant) is one of the most effective long-acting reversible contraceptives available in the US, but 1 out of 10 women stop using it in the first year due to bleeding irregularities. Our objective is to determine if receiving Implanon™ immediately postpartum affects bleeding profiles compared to women who receive an interval insertion during the first year after insertion.



*If we missed your publication, please let us know and we will be happy to include it in the next issue of the newsletter.*

### **Trichomoniasis and Other Sexually Transmitted Infections: Results From the 2001-2004 National Health and Nutrition Examination Surveys.**

Allsworth JE, Ratner JA, Peipert JF.

*Sex Transm Dis.* 2009 Dec;36(12):738-44.

### **Bacterial Vaginosis-Race and Sexual Transmission: Issues of Causation.**

Allsworth JE.

*Sex Transm Dis.* 2010 Jan 28. [Epub ahead of print] No abstract available.

### **Polymorphisms in MMP9 and SIPA1 are Associated with Increased Risk of Nodal Metastases in Early-Stage Cervical Cancer.**

Brooks R, Kizer N, Nguyen L, Jaishuen A, Wanat K, Nugent E, Grigsby P, Allsworth JE, Rader JS.

*Gynecol Oncol.* 2009 Nov 9. [Epub ahead of print]

### **Novel Imaging Modalities in Gynecologic Cancer.**

Brooks RA, Powell MA.

*Curr Oncol Rep.* 2009 Nov;11(6):466-72.

### **Screening and Treating for Primary Cytomegalovirus Infection in Pregnancy: Where Do We Stand? A Decision-Analytic and Economic Analysis.**

Cahill AG, Odibo AO, Stamilio DM, Macones GA.

*Am J Obstet Gynecol.* 2009 Nov;201(5):466.e1-7.

### **Universal Cervical Length Screening and Treatment with Vaginal Progesterone to Prevent Preterm Birth: A Decision and Economic Analysis.**

Cahill AG, Odibo AO, Caughey AB, Stamilio DM, Hassan SS, Macones GA, Romero R.

*Am J Obstet Gynecol.* 2010 Jan 14. [Epub ahead of print]

### **Umbilical Artery Doppler Indices in Small for Gestational Age Fetuses: Correlation with Adverse Outcomes and Placental Abnormalities.**

Dicke JM, Huettner P, Yan S, Odibo A, Kraus FT.

*J Ultrasound Med.* 2009 Dec;28(12):1603-10.

### **Providing Contraception for Women Taking Potentially Teratogenic Medications: A Survey of Internal Medicine Physicians' Knowledge, Attitudes and Barriers.**

Eisenberg DL, Stika C, Desai A, Baker D, Yost KJ.

*J Gen Intern Med.* 2010 Jan 20. [Epub ahead of print]

### **The Efficiency of First-Trimester Serum Analytes and Maternal Characteristics in Predicting Fetal Growth Disorders.**

Goetzinger KR, Singla A, Gerkowicz S, Dicke JM, Gray DL, Odibo AO.

*Am J Obstet Gynecol.* 2009 Oct;201(4):412.e1-6.

### **Association Offirst-Trimester Low PAPP-A Levels with Preterm Birth.**

Goetzinger KR, Cahill AG, Macones GA, Odibo AO.

*Prenat Diagn.* 2010 Jan 19. [Epub ahead of print]

**Home Screening Compared with Clinic-Based Screening for Sexually Transmitted Infections.**

Graseck AS, Secura GM, Allsworth JE, Madden T, Peipert JF.  
*Obstet Gynecol.* 2010;115(4):745-52.

**Reevaluating Humeral Length for the Detection of Fetal Trisomy 21.**

Gray DL, Dicke JM, Dickerson R, McCourt C, Odibo AO.  
*J Ultrasound Med.* 2009 Oct;28(10):1325-30.

**Do Race-Specific Definitions of Short Long Bones Improve the Detection of Down Syndrome on Second-Trimester Genetic Sonograms?**

Harper LM, Gray D, Dicke J, Stamilio DM, Macones GA, Odibo AO.  
*J Ultrasound Med.* 2010 Feb;29(2):231-5.

**Phase II Evaluation of Topotecan and Navelbine in Patients with Recurrent Ovarian, Fallopian Tube or Primary Peritoneal Cancer.**

Herzog TJ, Powell MA, Rader JS, Gibb RK, Lippmann L, Coleman RL, Mutch DG.  
*Gynecol Oncol.* 2008 Dec;111(3):467-73.

**Reasons for Ineffective Pre-Pregnancy Contraception Use in Patients Seeking Abortion Services.**

Homco JB, Peipert JF, Secura GM, Lewis VA, Allsworth JE.  
*Contraception.* 2009 Dec;80(6):569-74.

**The Safety of Obstetrical Ultrasound: A Review.**

Houston LE, Odibo AO, Macones GA.  
*Prenat Diagn.* 2009 Dec;29(13):1204-12.

**Dosing Chemotherapy in Obese Patients: Actual Versus Assigned Body Surface Area (BSA).**

Hunter RJ, Navo MA, Thaker PH, Bodurka DC, Wolf JK, Smith JA.  
*Cancer Treat Rev.* 2009 Feb;35(1):69-78.

**Clinical Outcomes of Definitive Intensity-Modulated Radiation Therapy with Fluorodeoxyglucose-Positron Emission Tomography Simulation in Patients with Locally Advanced Cervical Cancer.**

Kidd EA, Siegel BA, Dehdashti F, Rader JS, Mutic S, Mutch DG, Powell MA, Grigsby PW.  
*Int J Radiat Oncol Biol Phys.* 2009 Oct 30. [Epub ahead of print]

**The Role of PET/CT in the Management of Patients with Cervical Cancer: Practice Patterns of the Members of the Society of Gynecologic Oncologists.**

Kizer NT, Zigelboim I, Case AS, Dewdney SB, Thaker PH, Massad LS.  
*Gynecol Oncol.* 2009 Aug;114(2):310-4.

**Methodology and Analytic Techniques Used in Clinical Research: Associations with Journal Impact Factor.**

Kuroki LM, Allsworth JE, Peipert JF.  
*Obstet Gynecol.* 2009 Oct;114(4):877-84.

**Treatment of Localized Periodontal Disease in Pregnancy Does Not Reduce the Occurrence of Preterm Birth: Results from the Periodontal Infections and Prematurity Study (PIPS).**

Macones GA, Parry S, Nelson DB, Strauss JF, Ludmir J, Cohen AW, Stamilio DM, Appleby D, Clothier B, Sammel MD, Jeffcoat M.  
*Am J Obstet Gynecol.* 2010 Feb;202(2):147.e1-8.



**Intrauterine Contraception in Saint Louis: A Survey of Obstetrician and Gynecologists' Knowledge and Attitudes.**

Madden T, Allsworth JE, Hladky KJ, Secura GM, Peipert JF.  
*Contraception*. 2010 Feb;81(2):112-6.

**Meeting Report: The New FIGO Staging System for Cancers of the Vulva, Cervix, Endometrium and Sarcomas.**

Mutch DG.  
*Gynecol Oncol*. 2009;115:325-8.

**Long-Term Incidence of Cervical Cancer in Women with Human Immunodeficiency Virus.**

Massad LS, Seaberg EC, Watts DH, Minkoff H, Levine AM, Henry D, Colie C, Darragh TM, Hessol NA.  
*Cancer*. 2009 Feb 1;115(3):524-30.

**The Accuracy of Colposcopic Grading for Detection of High-Grade Cervical Intraepithelial Neoplasia.**

Massad LS, Jeronimo J, Katki HA, Schiffman M;  
*J Low Genit Tract Dis*. 2009 Jul;13(3):137-44.

**Predicting Adverse Neonatal Outcomes in Fetuses with Abdominal Wall Defects Using Prenatal Risk Factors.**

Nicholas SS, Stamilio DM, Dicke JM, Gray DL, Macones GA, Odibo AO.  
*Am J Obstet Gynecol*. 2009 Oct;201(4):383.e1-6.

**The Association Between Increased Use of Labor Induction and Reduced Rate of Cesarean Delivery.**

Nicholson JM, Cronholm P, Kellar LC, Stenson MH, Macones GA.  
*J Womens Health (Larchmt)*. 2009 Nov;18(11):1747-58.

**The Value of Perioperative Imaging in Patients with Uterine Sarcomas.**

Nugent EK, Zigelboim I, Case AS, Gao F, Thaker PH, Rader JS, Mutch DG, Massad LS.  
*Gynecol Oncol*. 2009 Oct;115(1):37-40.

**Chemoradiation in Locally Advanced Cervical Carcinoma: An Analysis of Cisplatin Dosing and Other Clinical Prognostic Factors.**

Nugent EK, Case AS, Hoff JT, Zigelboim I, Dewitt LL, Trinkhaus K, Mutch DG, Thaker PH, Massad LS, Rader JS.  
*Gynecol Oncol*. 2010 Mar;116(3):438-41.

**Does the Combination of Fronto-Maxillary Facial Angle and Nasal Bone Evaluation Improve the Detection of Down Syndrome in the Second Trimester?**

Odibo AO, Schoenborn JA, Haas K, Macones GA.  
*Prenat Diagn*. 2009 Oct;29(10):947-51.

**Is Chorionic Villus Sampling Associated with Hypertensive Disorders of Pregnancy?**

Odibo AO, Singla A, Gray DL, Dicke JM, Oberle B, Crane J.  
*Prenat Diagn*. 2010 Jan;30(1):9-13.

**Predicting Perinatal Mortality in Preterm Intrauterine Growth Restriction.**

Scifres CM, Stamilio D, Macones GA, Odibo AO.  
*Am J Perinatol*. 2009 Nov;26(10):723-8.

**Echogenic Intracardiac Foci: Associated with Increased Risk for Fetal Trisomy 21 or Not?**

Shanks AL, Odibo AO, Gray DL.  
*J Ultrasound Med*. 2009 Dec;28(12):1639-43.

### **Nasal Bone in Prenatal Trisomy 21 Screening.**

Shanks A, Odibo A.

*Obstet Gynecol Surv.* 2010 Jan;65(1):46-52.

### **Effects of Cancer Treatment on Ovarian Function.**

Stroud JS, Mutch D, Rader J, Powell M, Thaker PH, Grigsby PW.

*Fertil Steril.* 2009 Aug;92(2):417-27.

### **Association Between Tampon Use and Choosing the Contraceptive Vaginal Ring.**

Tepe M, Mestad R, Secura G, Allsworth JE, Madden T, Peipert JF.

*Obstet Gynecol.* 2010;115(4):735-9.

### **Prevalence and Likelihood Ratios for Aneuploidy in Fetuses Diagnosed Prenatally with Isolated Congenital Cardiac Defects.**

Tuuli MG, Dicke JM, Stamilio DM, Gray DL, Macones GA, Rampersad R, Odibo AO.

*Am J Obstet Gynecol.* 2009 Oct;201(4):390.e1-5.

### **Validation of Placental Vascular Sonobiopsy for Obtaining Representative Placental Vascular Indices by Three-Dimensional Power Doppler Ultrasonography.**

Tuuli MG, Houser M, Odibo L, Huster K, Macones GA, Odibo AO.

*Placenta.* 2010 Jan 8. [Epub ahead of print]

### **HIV Infection and Women's Sexual Functioning.**

Wilson TE, Jean-Louis G, Schwartz R, Golub ET, Cohen MH, Maki P, Greenblatt R, Massad LS, Robison E, Goparaju L, Lindau S.

*J Acquir Immune Defic Syndr.* 2010 Feb 20. [Epub ahead of print]

### **The Association between Prepregnancy Maternal Body Mass Index and Preterm Delivery.**

Zhong Y, Cahill AG, Macones GA, Zhu F, Odibo AO.

*Am J Perinatol.* 2009 Oct 12. [Epub ahead of print]

### **"Surgical Apgar Score" Predicts Postoperative Complications After Cytoreduction for Advanced Ovarian Cancer.**

Zighelboim I, Kizer N, Taylor NP, Case AS, Gao F, Thaker PH, Rader JS, Massad LS, Mutch DG, Powell MA.

*Gynecol Oncol.* 2010 Mar;116(3):370-3.