Welcome to the 2010 Fall edition of The eCurrent, the newsletter for the Department of OB/GYN, Division of Clinical Research (DCR). Over the last few months, the division has formed alliances with researchers in other WU School of Medicine departments including the Departments of Pediatrics, Pathology and Immunology, and Microbiology. These collaborations have brought a number of new grants to our faculty and greater strength to the quality of research conducted.

The Women and Infant’s Health Specimen Consortium (WIHSC), a recently awarded three-year CDI grant, incorporates faculty from multiple WU departments. The Primary Investigators include: Dr. Ann Gronowski, Associate Professor in Pathology and Immunology, Dr. Kelle Moley, Professor in OB/GYN, and Dr. Marwan Shinawi, Assistant Professor in the Department of Pediatrics, Division of Genetics and Genomic Medicine. This project has been expanded to include the infants born to mothers enrolled in the study.

In addition, the WIHSC provides specimens to Dr. Indira Mysorekar, Assistant Professor in OB/GYN, who was recently awarded the Burroughs Welcome Fund for Preterm Birth Initiative to examine the pathogenic flora in women with preterm births. Dr. Amanda Lewis, Assistant Professor of Molecular Microbiology, is also collaborating with the DCR and WIHSC on a study examining the bacterial-host interactions in blood, umbilical cord blood, and amniotic fluid. Her research utilizes samples that are obtained from the women who enroll in WIHSC.

Collaborations with other departments in the Washington University School of Medicine showcase the comprehensive, in-depth research initiatives of the DCR. With increased financial support and integrated research, the DCR continues to provide high quality research for women’s health.
Anthony Odibo, MD
Associate Professor
Department of Obstetrics and Gynecology
Maternal Fetal Medicine
Washington University School of Medicine

Honors and Awards:
Perinatal Research Society, 2008
Clinical Translational Research Award - Barnes-Jewish Hospital Foundation, 2007
Apple Award for medical students teaching, 2001

Dr Odibo is an Associate Professor of Obstetrics and Gynecology in the Division of Maternal Fetal Medicine, Department of Obstetrics and Gynecology, Washington University, St. Louis. He completed his medical school training at the University of Benin, Nigeria. He had residency training in Obstetrics and Gynecology in the United Kingdom and at Thomas Jefferson University in Philadelphia and a Fellowship in Maternal Fetal Medicine at the University of Connecticut School of Medicine. He underwent further fellowship training in Clinical Epidemiology, resulting in a Master’s Degree from the University of Pennsylvania.

Dr Odibo’s areas of clinical interest include prenatal diagnosis, therapy and screening for aneuploidy. He is Co-Director of the Fetal Care Center at Washington University.

His research interests include first-trimester screening for adverse pregnancy outcomes, the epidemiology of preterm delivery and intrauterine growth-restriction as well as evaluation of new technologies using decision analytical modeling. He is Editor for BJOG: an International Journal of Obstetrics and Gynecology; Obstetrics and Gynecology International and on the Editorial Board for Prenatal Diagnosis.
Dr. Zighelboim received his medical degree (Magna Cum Laude) from Universidad Central de Venezuela in 1999 and went on to practice as a primary care provider and rural physician in his native Venezuela as part of the standard requirement to obtain his unrestricted Venezuelan medical license. He continued his training in the Department of Obstetrics and Gynecology at Baylor College of Medicine, completing his residency training in Obstetrics and Gynecology in 2005. He obtained his fellowship training in Gynecologic Oncology at Washington University School of Medicine/Barnes Jewish Hospital from 2005 to 2008.

Dr. Zighelboim’s clinical interests include radical surgery for ovarian cancer, the evaluation and treatment of patients with increased genetic cancer susceptibility, minimally invasive and robotic surgery for gynecologic malignancies, complex pelvic surgery and novel therapeutics for the treatment of gynecologic cancers.

In the research arena, Dr. Zighelboim has focused on the development and validation of molecular and novel imaging biomarkers to improve gynecologic cancer care and outcomes. Early in his fellowship, Dr. Zighelboim spent a year researching the molecular events leading to the development and progression of endometrial cancers under the mentoring of Dr. Paul Goodfellow. During that time, he developed a special interest for the translational applicability of molecular events in endometrial cancer. His work led to the discovery of the prognostic potential of ATR mutations in patients with mismatch deficient endometrial cancer. This important finding was published in the Journal of Clinical Oncology and led to the development of a validation study by the Gynecologic Oncology Group. A proposal for these validation studies has been favorably scored and will hopefully be funded by NCI in the near future under an R21 mechanism.

Additionally, Dr. Zighelboim is currently developing protocols for first-in human studies utilizing novel imaging modalities to introduce novel paradigms in the evaluation and risk stratification of endometrial cancer.

Despite a busy clinical practice, Dr. Zighelboim enjoys reading, traveling and spending time with his wife Valeska and his son Noah.
What’s Happening at the DCR

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

**OBSTETRICS**

**BACTERIAL-HOST INTERACTIONS IN BLOOD AND AMNIOTIC FLUID**
*PI: Amanda Lewis, PhD*
The aim of the study is to examine the impact of bacterial surface carbohydrate structures on mechanisms of survival in blood and amniotic fluid and the potential consequences of bacterial products on proinflammatory cytokine induction. Approximately 100 samples of each of the following specimens: blood, umbilical cord blood, and amniotic fluid, will be collected through the Women and Infant’s Health Specimen Consortium over a 3 year period.

**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: Danielle Frueh, RN, BSN*
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 antepartum 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 ≤ 7.10 to those with a cord pH > 7.10. A total of 5,000 charts will be reviewed over a three-year period.

**GESTATIONAL WEIGHT GAIN IN THE OBESE GRAVIDA**
*PI: Lorie Harper, MD • CRNC: Patty Fogerty, RN, MSN*
A prospective cohort study enrolling women prior to 20 weeks gestation. The aim of the study is to examine the impact of gestational weight gain on maternal and neonatal pregnancy outcomes. We will also investigate the relationship between serum biomarkers of adiposity and pregnancy outcomes. Patients will be enrolled through the WIHSC.

**IUGR STUDY**
*PI: Anthony Odibo, MD, MSCE • CRNC: Linda Odibo, RN, BSc, MN*
A prospective cohort study aimed at comparing the ability of two antepartum tests, (Doppler flow studies of feto-placental 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 the Center for Advanced Medicine. A total of 318 pregnant women will be enrolled.

**MELISSA STUDY: MATERNAL BLOOD IS SOURCE TO ACCURATELY DIAGNOSE FETAL ANEUPLOIDY**
*PI: Anthony Odibo MD, MSCE • CRNC: Linda Odibo RN, BSc, MN*
Sponsor: Artemis Health Inc.
A prospective, multi-center observational study with blinded, nested case control analyses. The primary objective of the study is to determine the performance characteristics (sensitivity and specificity) of the Artemis Health Prenatal Aneuploidy Diagnostic Test to detect fetal trisomy 21 compared to karyotype results from fetal cells obtained from amniocentesis or CVS. Secondary objectives are to assess performance of the test to detect male gender (XY) and other less common aneuploidies (Trisomy 13, Trisomy 18 and Turner Syndrome [45, X]) compared to clinical fetal karyotype.
OCCULT INFECTIONS AND PRETERM DELIVERY

Pl: Indira Mysolekar, 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.

PANORAMA: PREDICTING NEONATAL ACADeMIA AND NEUROLOGIC INJURY WITH INTRAPARtUM FETAL HEART RATE MONItORING

Pl: Alison Cahill, MD, MSCI • CRNC: Carla Chung, RN, BSN; Danielle Frueh, RN, BSN; Monica Anderson, RN, BSN; Tracy Burger 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 ≤ 7.10, if characteristics of fetal heart rate decelerations, have the same association with metabolic acidemia, respiratory acidemia or mixed academia and if characteristics of fetal heart rate decelerations, have the same predictive ability for infant umbilical cord arterial pH ≤ 7.10 in three subgroups of patients with higher prevalence of academia (chorioamnionitis, preeclampsia, IUGR). The study also aims to develop and validate a clinical predictive index to identify specific fetuses at high risk for academia 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

Pl: Methodius Tuuli, MD, MPH • CRNC: Linda Odibo, RN, BSc, MN

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 predictive value of the model to predict adverse pregnancy outcome. A total of 1,500 women will be recruited from the Obstetric Ultrasound Department, Center for Advanced Medicine over a two-year period.

PREDICTING ADVeRSe PReGNANCY OUtCOMES

Pl: Anthony Odibo, MD, MSCE • CRNC: Linda Odibo, RN, BSc, MN

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, PP13 and PIGF levels. A total of 1,500 women will be recruited from the Obstetric Ultrasound Department, Center for Advanced Medicine over a three-year period.

A PHASe 3b, MULTI-CeNteR, RANDOMIZeD, DOUbLe-bLIND StUDY OF hYDROXYPROGeSteRONe CAPROAte INJeCtION, 250 MG/ML, VeRSUS VehICLe FOR the PREVeNtION OF PReteRM bIRth IN WOMeN WIth A PReVIOUS SINGletON SPONtANeOUS PReteRM DeLIVeRY

Pl: George Macones, MD, MSCE • RA: Molly Meyer

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 Center for Advanced Medicine. A total of 20 women will be enrolled at this site.
SLEEP DEPRIVATION DURING PREGNANCY
Pl: George Macones, MD, MSCE, Jen Jen Chang, PhD • RA: Molly Meyer
A longitudinal prospective cohort study to ascertain the prevalence and risk factors of chronic sleep deprivation during pregnancy and its effects on postpartum depression and spontaneous preterm delivery. A total of 356 nulliparous women will be recruited from the antenatal clinic in BJC and the Center for Advance Medicine over a three-year period.

THE ST. LOUIS NEONATAL GUT MICROBIOME INITIATIVE
Pl: 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.

VDAART: VITAMIN D ANTENATAL ASTHMA REDUCTION TRIAL
Pl: Robert Strunk, MD • CRNC: Danae Larson, RN, BSN • RA: 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-HOST INTERACTIONS IN VAGINAL FLUIDS
Pl: Amanda Lewis, PhD • Co-PI’s: Jenifer Allsworth, PhD, Tessa Madden, MD, MPH
We have shown that sialidase activity can have a profound impact on the physical properties of proteins involved in mucosal immunity that are modified with sialic acid residues. Using clinical samples from women with or without BV, we aim to further characterize how sialidases may be involved in the initiation and complications of this infection using molecular, tissue culture, and animal models. Approximately 800 vaginal swabs will be collected through the VAST study over a 3 year period.

THE CONTRACEPTIVE CHOICE PROJECT
Pl: 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.

COMPUTERIZED CONTRACEPTIVE DECISION MAKING TOOL
Pl: 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.
IMMEDIATE POST-PARTUM INSERTION OF ETONOGESTREL SUBDERMAL IMPLANT CONTRACEPTIVE DEVICE
Pl: David Eisenberg, MD, MPH
Sponsor: ACOG Bayer grant
A sub study of the contraceptive CHOICE project to determine if receiving Implanon™ immediately post-partum affects bleeding profiles compared to women who receive an interval Implanon™ insertion. A further aim of the study is to compare the proportion of women who report bleeding at 6 months after Implanon™ insertion between women who receive the implant immediately post-partum versus interval placement.

A PHASE 3, RANDOMIZED, MULTI-CENTER, OPEN-LABEL STUDY OF A LEVONORGESTREL-RELEASING INTRAUTERINE SYSTEM (20 mcg/day) AND MIRENA® FOR LONG-TERM REVERSIBLE CONTRACEPTION UP TO FIVE YEARS
Pl: 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.

MISTIC: MIRENA INTRAUTERINE SYSTEM TIMING OF INSERTION CONTROLLED TRIAL
Pl: Lorie Harper, MD • Co-Pl: David Eisenberg, MD, MPH
This substudy of the CHOICE Contraceptive Project is a randomized control trial with the aim of determining the timing of Mirena® insertion that results in the greater proportion of women with a Mirena in place at 6 months post-partum. Women requesting the Mirena for post-partum contraception will be enrolled at CHOICE sites at 36 weeks gestation or greater and will be randomized at the time of vaginal delivery to receive the Mirena immediately post-placenta or at 4-8 weeks post-partum. Approximately 200 women will be randomized.

OVARIAN RESERVE AND JUVENILE/ADULT RHEUMATOID ARTHRITIS
Pl: 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, JRA/JIA, or PA (psoriatic arthritis). 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 Center for Advanced Medicine. Recruitment began in December, 2008 and will continue until 300 patients are enrolled.

REPRODUCTIVE OUTCOMES IN OBESE WOMEN WITH INFERTILITY
Pl: 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.

STEPS: STUDY TO EVALUATE MALE PARTNER SCREENING
Pl: Jeffrey F. Peipert, MD, PhD • CRA: Shirley Shih
A randomized controlled trial comparing home- with clinic-based urine screening for sexually transmitted infections (STIs) in men. The aim of the study is to evaluate the acceptability of STI screening and the screening rates achieved with home- versus clinic-based approaches. A total of 500 men will be enrolled.

THE VAST STUDY
Pl: Jenifer Allsworth, PhD • CRNC: Linda Odibo, RN, BSc, MN
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 • Danae Larson, RN, BSN*

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**
*PI: Zevidah Vickery, MD; Dr. Jeffrey F. Peipert, MD, PhD*

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.

**WIHSC: WOMEN AND INFANT’S HEALTH SPECIMEN CONSORTIUM**
*PI: Ann Gronowski, PhD; Kelle Moley, MD; Jenifer Allsworth, PhD; Marwan Shinawi, MD • CRC: Christine Kramer*

Sponsored by a Children’s Discovery Institute Grant

The study aim is to create a structure to facilitate the collection of patient specimens for women and infant’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. 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 Reproductive Endocrinology and Infertility Center, the Center for Advanced Medicine, Barnes Jewish Women’s Health Clinic and Labor and Delivery. The study recently received an award from the CDI starting July 2010. Approximately 1500 women will be enrolled over the next 3 years.

**ONCOLOGY**

*A PHASE III TRIAL OF PELVIC RADIATION THERAPY VERSUS VAGINAL CUFF BRACHYTHERAPY FOLLOWED BY PACLITAXEL/CARBOPLATIN CHEMOTHERAPY IN PATIENTS WITH HIGH-RISK, EARLY STAGE ENDOMETRIAL CARCINOMA*  
*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 249 - Cooperative Group

A Phase III randomized trial of pelvic radiation therapy versus vaginal cuff brachytherapy followed by chemotherapy utilizing carboplatin and paclitaxel in women with early stage endometrial carcinoma who are at high risk for recurrence. Group-wide target accrual: 562

*A RANDOMIZED PHASE III TRIAL OF CISPLATIN AND TUMOR VOLUME DIRECTED IRRADIATION FOLLOWED BY CARBOPLATIN AND PACLITAXEL VS. CARBOPLATIN AND PACLITAXEL FOR OPTIMALLY DEBULKED, ADVANCED ENDOMETRIAL CARCINOMA*  
*PI: David G. Mutch, MD • CCRP: Lynne Lippmann*

Sponsored by Gynecologic Oncology Group (NCI), GOG 258 - Cooperative Group

A Phase III randomized trial of tumor volume-directed irradiation with cisplatin as a radiation sensitizer followed by chemotherapy utilizing carboplatin and paclitaxel versus chemotherapy utilizing carboplatin and paclitaxel in women who have undergone optimal debulking for advanced endometrial carcinoma. Group-wide target accrual: 804.

*Sampling of current studies*
A THREE ARM RANDOMIZED PHASE II STUDY OF PACLITAXEL/CARBOPLATIN/BEVACIZUMAB (NSC #704865, IND #7921), PACLITAXEL/CARBOPLATIN/TEMSIROLIMUS (NSC #683864, IND #61010) AND IXABEPILONE (NSC #710428, IND #59699)/CARBOPLATIN/BEVACIZUMAB AS INITIAL THERAPY FOR MEASURABLE STAGE III OR IVA, STAGE IVB, OR RECURRENT ENDOMETRIAL CANCER

PI: David G. Mutch, MD • CCRP: Lynne Lippmann
Sponsored by Gynecologic Oncology Group (NCI), GOG 0086P - Cooperative Group
A Phase II randomized trial for the treatment of either advanced stage primary or recurrent endometrial carcinoma. This is a 3-arm trial utilizing chemotherapy with the addition of biologic therapies, either Bevacizumab (a recombinant humanized anti-VEGF monoclonal antibody), Temsirolimus (an mTOR inhibitor) or Ixabepilone (a non-taxane microtubule stabilizing agent) for 6 cycles followed by maintenance treatment with biologic therapy. It includes a translational research component.

AN OPEN LABEL, SINGLE-ARM MULTICENTER PHASE 2 STUDY OF E7080 IN SUBJECTS WITH ADVANCED ENDOMETRIAL CANCER AND DISEASE PROGRESSION FOLLOWING FIRST-LINE CHEMOTHERAPY

Site PI: Matthew Powell, MD • CCRP: Melissa Hance; Lynne Lippmann
Sponsored by: EISAI Pharmaceuticals - E7080
A Phase II study utilizing E7080 (multi-targeted kinase inhibitor of VEGFR, FGFR, PDGFR and c-kit) in the treatment of recurrent endometrial carcinoma in women who have received 1 prior systemic chemotherapy for primary, unresectable or recurrent endometrial carcinoma. This is an oral medication taken daily on a 28-day cycle. It includes a translational research component. There is an optional imaging DCE-MRI component for eligible subjects in which Washington University will participate. Group-wide target accrual: Stage I accrual 47. If second stage is warranted, there will be a total of 130.

BIOBEHAVIORAL INFLUENCES AND THE OVARIAN TUMOR MICROENVIRONMENT

PI: Premal Thaker MD • Coordinator: Annie White
Funded: National Institute of Health
A biobehavioral study designed to understand the relationship between behavioral factors, hormones, and chemicals produced by the body that may help tumor growth in ovarian cancer. The purpose of this study is to better understand the risk factors related to the progression of ovarian cancer. Group wide target accrual: 195

FEASIBILITY STUDY: THERAPEUTIC TARGETING OF STRESS FACTORS IN OVARIAN CANCER PATIENTS

PI: Premal Thaker MD • Coordinator: Annie White
Funded: Gynecologic Cancer Foundation
A feasibility trial to investigate the effect of biobehavioral factors such as stress on how chemotherapy drugs affect tumor growth in these types of cancer. The aim of the study is to determine if the addition of a beta-blocker such as Propranolol (Inderal) is tolerable when given with chemotherapy in the treatment of newly diagnosed ovarian, fallopian tube, or primary peritoneal cancer. This will help us understand an alteration of these behavioral factors will allow chemotherapy to work more effectively. Group wide target accrual: 25

A PHASE II EVALUATION OF SU11248 (SUNITINIB MALATE) (IND #74019, NSC #736511) IN THE TREATMENT OF PERSISTENT OR RECURRENT CLEAR CELL OVARIAN CARCINOMA

PI: David G. Mutch, MD • CCRP: Lynne Lippmann
Sponsored by Gynecologic Oncology Group (NCI), GOG 254 - Cooperative Group
A Phase II study of sunitinib malate (a receptor tyrosine kinase inhibitor) as a treatment for recurrence of ovarian cancer (in women who have had 2 or less prior cytotoxic treatments) in which either the primary or recurrent tumor shows at least 50% clear cell histology. It includes a translational research component.
Group-wide target accrual: Stage 1 accrual 22, total 56.
A PHASE I PHARMACOKINETIC STUDY OF INTRAPERITONEAL CTEP-SUPPLIED AGENT BORTEZOMIB AND CARBOPLATIN IN PATIENTS WITH PERSISTENT OR RECURRENT OVARIAN, FALLOPIAN TUBE, OR PRIMARY PERITONEAL CANCER

PI: David G. Mutch, MD • CCRP: Lynne Lippmann
Sponsored by Gynecologic Oncology Group (NCI), GOG 9924 - Cooperative Group
A Phase I study of Bortezomib (a proteosome inhibitor) and Carboplatin in women who have had up to 4 prior cytotoxic regimens for treatment of their primary and recurrent disease. Both drugs are given via the intraperitoneal route. It includes a translational research component.

PROSPECTIVE STUDY OF RISK-REDUCING SALPINGO-OOPHORECTOMY (RRSO) AND LONGITUDINAL CA-125 SCREENING AMONG WOMEN AT INCREASED GENETIC RISK OF OVARIAN CANCER: EXTENDED FOLLOW-UP OF SELECT GOG-0199 STUDY PARTICIPANTS

PI: David G. Mutch, MD • CCRP: Lynne Lippmann
Sponsored by Gynecologic Oncology Group (NCI), GOG 8199 - Cooperative Group
This is an extension of the original GOG 199 study for women at increased genetic risk of developing ovarian cancer. The original study follow-up lasted 5 years and this extension study will extend the follow-up an additional five years for women who were initially on GOG 199 and who meet the criteria for this study. Washington University is one of the five Data Coordinating Centers for this study (see new grant information).

A RANDOMIZED DOUBLE-BLIND PHASE II TRIAL OF CELECOXIB, A COX-2 INHIBITOR IN THE TREATMENT OF PATIENTS WITH CERVICAL INTRAEPITHELIAL NEOPLASIA 2/3 OR 3

PI: David G. Mutch, MD • CCRP: Lynne Lippmann
Sponsored by Gynecologic Oncology Group (NCI), GOG 207 - Cooperative Group
A Phase II study of women randomizing them to treatment with either celecoxib or placebo for 14-18 weeks after a cervical biopsy showing CIN2/3. Subjects undergo colposcopic evaluation at baseline, week 8 and then around week 14-18. Colposcopic images are uploaded for review. There is a translational component to this study.
National Institute of Health K01
PI: George Macones, MD; Jen Jen Chang, PhD | Award Period: 7/07/10-5/31/13
This is a three year grant to study the prevalence and risk factors of chronic sleep deprivation during pregnancy and its effects on postpartum depression and spontaneous preterm delivery under the mentorship of Dr. Macones.

Children's Discovery Institute
PI: Kelle Moley, MD | Award period: 7/01/10-6/30/13
Under the grant from the Children's Discovery Institute, the WIHSC will continue and expand the breadth and depth of this Consortium to accommodate an increased number of projects and samples collected during pregnancy and to follow the children born from these pregnancies. Several new areas have been targeted and aims have evolved based on new hypothesis driven projects proposed by new investigators interested in neonatal and pediatric projects. This Consortium, the WIHSC, has the potential to become a vital source of tissue and patient data, both mother and child, needed to accelerate new pathways to discovery in childhood disease.

GOG 0199 – Coordinating Center
PI: David Mutch, MD | Award period: 9/1/10-8/31/11
This is the first year of what will be a five year grant to be one of five Data Coordinating Centers (DCC’s) for the extension study for a select group of patients initially entered by multiple GOG institutions on GOG 199. Patients who were followed or underwent RRSO as part of GOG 0199 and are deemed eligible for this component will be consented by that institution for this extension study. Once the consent process has taken place, the patient will be handed off to one of five DCC’s for yearly follow-up. Patients will be assigned to a DCC in a sequential fashion once the original GOG institution has notified the GOG that the patient has consented for the extension study. Expected accrual may be 400-500 patients per DCC and is dependent upon the original GOG institution providing IRB approval for the extension study.

Society of Family Planning Grant
PI: David Eisenberg, MD, MPH | Award period: 10/1/10-10/01/11
The primary objective of this randomized, open-label, controlled trial aims to determine the timing of Mirena® insertion that results in the greater proportion of women with a Mirena® in place at 6 months post-partum.
Maternal undernutrition influences placental-fetal development.
Belkacemi L, Nelson DM, Desai M, Ross MG.

The relationship between female genital cutting and obstetric fistulae.
Browning A, Allsworth JE, Wall LL.

Vaginal birth after caesarean for women with three or more prior caesareans: assessing safety and success.
Cahill AG, Tuuli M, Odibo AO, Stamilio DM, Macones GA.

Intrapartum magnesium for prevention of cerebral palsy: continuing controversy?
Cahill AG, Stout MJ, Caughey AB.

Frequent epidural dosing as a marker for impending uterine rupture in patients who attempt vaginal birth after cesarean delivery.
Cahill AG, Odibo AO, Allsworth JE, Macones GA.

Prenatal screening for thrombophilias: indications and controversies.
Carbone JF, Rampersad R.

Cost-effectiveness of Down syndrome screening paradigms.
Caughey AB, Kaimal AJ, Odibo AO.

Association of early-onset pre-eclampsia in first pregnancy with normotensive second pregnancy outcomes: a population-based study.
Chang JJ, Muglia LJ, Macones GA.

Sleep deprivation during pregnancy and maternal and fetal outcomes: is there a relationship?
Chang JJ, Pien GW, Duntley SP, Macones GA.

Hypoxia down-regulates p53 but induces apoptosis and enhances expression of BAD in cultures of human syncytiotrophoblasts.
Chen B, Longtine MS, Sadovsky Y, Nelson DM.
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