



# ANNUAL REPORT

## 2007-2008

### Obstetrics and Gynecology

John T. Repke, M.D., F.A.C.O.G  
Professor and Chairman  
December 1, 2008

P E N N S T A T E

*Obstetrics and Gynecology*

## **Annual Report 2007/2008**

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## REPORT FROM THE CHAIRMAN

Thank you for taking the time to review our Annual Report for the period July 1, 2007-June 30, 2008. The year has truly “flown by”, and it is my good fortune to be able to report to you what a tremendously successful year it has been. Our four core missions have grown to levels that would have been difficult to imagine a decade ago.

Our Educational programs, encompassing student, resident and post-graduate education continue to flourish, Obstetrics and Gynecology continues to attract the best and the brightest medical students, and we are adding 3 graduates of the 2008 Penn State College of Medicine graduating class to our Residency Program on July 1, 2008.

Our Patient care mission has also reached new heights, with increasing volumes of patients in all of the clinical specialty and sub-specialty areas. As you will see in the following pages new clinical programs are in development, and we expect continued growth of our clinical volumes for FY 2009. Four of our faculty have been named to “Best Doctors in America” and as a Department we continue to score very highly in patient satisfaction when compared to national peer institutions.

The research mission of the department remains strong, with \$3.7 million dollars of total funding, up from \$2.9 million dollars in the previous year, no small accomplishment given current economic conditions in biomedical research. We continue to be an internationally renowned center for health services research, under the direction of Dr. Carol Weisman, and research in the area of Polycystic Ovarian Syndrome (PCOS) under the direction of Dr. Richard Legro. The Reproductive Endocrinology Division remains a member of the NIH-Reproductive Medicine Network, and in Gynecologic Oncology we remain a parent institution in the National Cancer Institute’s Gynecologic Oncology Group (GOG). Our Maternal-Fetal Medicine Division provides the highest level of prenatal diagnostic and ultrasound services available in the region, while also providing, with five Board Certified Maternal-Fetal Medicine specialists, the best in high risk pregnancy management. Our Women’s Health Division continues to expand, and with the creation of a new Division of Urogynecology/Minimally Invasive Surgery set to begin offering services on September 1, 2008 we expect the continuing growth of our Gynecologic specialties to match or exceed the continuing growth of our Obstetric services.

Our commitment to outreach remains strong, and encompasses all of the above missions. Plans are underway to initiate a research consortium among our affiliated OB/GYN Departments (I hope to be able to report some exciting accomplishments from this activity in next year’s report) that should greatly enhance our capacity for collaborative clinical research. Our student clerkship at Mt. Nittany Medical Center in State College is a pioneer program for The Penn State Milton S. Hershey Medical Center and under the direction of Dr. Angela Hardyk is off to a great start and further exemplifies our commitment to reaching out to all of central Pennsylvania. We have also successfully placed a full-time Maternal Fetal Medicine specialist at Wyoming Valley Medical Center in Wilkes Barre, PA, greatly increasing their capacity for managing high-risk pregnancies.

As pleased as I am to report to you our successes, it would also be appropriate to also tell you that the next year also poses great challenges. We are committed to a major expansion of Gynecologic Oncology services and major recruitment efforts are now underway to effect the changes needed to allow for full integration of these services into the Penn State Cancer Institute. Expansion of our inpatient and outpatient facilities are also going to become necessary to meet increasing patient demand and in a time of relative economic uncertainty we shall work closely with Hospital Administration to make certain that our services continue to meet the needs of Central Pennsylvania and our referring physicians.

Finally, as has been my custom to do in years past, I must acknowledge all of the wonderful people, physicians, nurses and support staff, whose efforts are responsible for our success. I would also like to acknowledge our patients and families, who entrust us with their care and the care of their loved ones, and our generous donors, without whose generous support we could not be succeeding at our current level, so to all of you my sincere thanks.

Best regards,

John T. Repke, M.D., F.A.C.O.G.  
University Professor and Chairman  
Department of Obstetrics and Gynecology  
Penn State University College of Medicine  
Obstetrician-Gynecologist-In-Chief  
The Milton S. Hershey Medical Center

## **DEPARTMENT OF OBSTETRICS AND GYNECOLOGY**

**JOHN T. REPKE, M.D., F.A.C.O.G.  
UNIVERSITY PROFESSOR AND CHAIRMAN  
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY  
PENN STATE UNIVERSITY, COLLEGE OF MEDICINE  
OBSTETRICIAN-GYNECOLOGIST-IN-CHIEF  
THE MILTON S. HERSHEY MEDICAL CENTER**

### **Division of Gynecologic Oncology**

Rodrigue Mortel, M.D., Professor Emeritus  
George J. Olt, M.D., Professor, Division Chief  
Edward S. Podczaski, M.D., Professor

### **Division of Maternal-Fetal Medicine**

John T. Repke, M.D., F.A.C.O.G., Professor and Chairman, Department of  
Obstetrics and Gynecology  
Serdar H. Ural, M.D., FACOG, Associate Professor and Division Chief  
Anthony Ambrose, M.D., FACOG, Associate Professor  
John J. Botti, M.D., F.A.C.O.G., Professor and Director of Perinatal Outreach  
Adam Duhl, M.D., F.A.C.O.G., Clinical Associate Professor  
Judith Weisz, M.B., B. Chir.

### **Division of Reproductive Endocrinology Faculty**

William C. Dodson, M.D., Professor and Division Chief  
Stephanie J. Estes, M.D., Assistant Professor  
Carol L. Gnatuk, M.D., Assistant Professor  
Richard S. Legro, M.D., Professor  
Courtney Murray, C.N.M.

**Women's Health**

David R. Halbert, M.D., Professor Emeritus

Matthew F. Davies, M.D., Associate Professor, Division Chief, Residency  
Program Director

Carie D'Agata, M.D., Assistant Professor

Virginia Hall, M.D., Associate Professor

Gerald Harkins, M.D., Assistant Professor and Chief – Section of Minimally  
Invasive Surgery

Rae Kennedy, M.D., Assistant Professor

Colin MacNeill, M.D., Associate Professor

Richard Pees, M.D., Associate Professor

Holly Thomas, M.D., Assistant Professor, Medical Director for Outpatient  
Services, Assistant Residency Program Director

Robert Yarwood, M.D. Associate Professor, Student Clerkship Director

Barbara Smith, CNM

Wendy Jones, CRNP

Kim Shuster- Dubois, CRNP

Amy Stauffer, CRNP

## **House Staff**

### **PGY4**

Danielle Hazard, M.D.  
Sangeetha Konda, M.D.  
Jaimey Pauli, M.D.  
Thanh Truong, M.D.

### **PGY3**

Corenthian Booker, M.D.  
Kimberly Kesler, M.D.  
Julie Messimer, M.D.  
Sarah Buchanan, M.D.  
Lisa Vigue, M.D.

### **PGY2**

M. Michele Martins, M.D.  
Amber O'Leary, M.D.  
Simone Piraino, M.D.  
Amanda Wait, D.O.  
Kerri Wenzel, M.D.

### **PGY1**

Angela Bohr, M.D.  
Brooke Halliwell, D.O.  
Katherine Lupo, M.D.  
Sarah McCollester, M.D.  
Jennifer Potts, M.D.

# ADMINISTRATION UPDATE FOR FISCAL YEAR 2007/2008

## Faculty/Staff

### **John T. Repke, M.D., F.A.C.O.G., Professor and Chairman**

Steve Mancuso, Administrator  
Joy Zeager, Operations Director  
Christopher Morrow, Financial Liaison

## Finance/Clerical

Angela Leffew, MBA, Financial Analyst  
Sherry Klahr, Administrative Associate  
Cheryl Mathias, Residency Coordinator

## Professional Billing

Kevin Haak, Billing Work Unit Leader  
Beverly Kauffman, CPC, Professional Coder/Abstractor  
Deborah Hagerty, CPC, Professional Coder/Abstractor  
Anne Shutter, CPC, Professional Coder/Abstractor  
Dorene Koons, Professional Coder/Abstractor

The Department of Obstetrics and Gynecology has completed the 2007/2008 fiscal year with many outstanding initiatives implemented and with continued growth and success as a team. Our plans for 2008/2009 will place the department in a position of greater recognition in the marketplace and high patient satisfaction.

The department ended the year in a positive financial status thanks to the efforts of our clinical and research faculty and support staff. Outpatient clinic visits for the year totaled 47,468 for 2007/2008. Patient revenue was \$24,268,852, an increase of 21% over 2006/2007. Deliveries for the year ended at 1,703, which is a 4.9% increase over the prior year and, for the 4<sup>th</sup> consecutive year, the highest annual number of deliveries in the history of the Medical Center. Our goal is set at 1,800 for 2008/2009, which will be another milestone for the department. Grant funding for 2007/2008 was \$2,257,815.

## Professional Billing Update

Our Ob/Gyn professional billing office has been successful in numerous areas for the department. Highlights of those initiatives include the following:

1. The coding staff continues to increase in charge capture, minimal rejections and reduced errors for the department.



2. The coding office continues to review and enter all professional charges for the outpatient clinical areas in the OB/GYN Department.
3. The department is now operating with four coder/abstractors. Two are dedicated to outpatient services and education and two are dedicated to inpatient, surgical, delivery, and emergency services. The coding staff has also continued to perform registration and coding functions for the MFM outreach initiative at Wyoming Valley.
4. Continuation and refinement of the OR scheduling process for determining out-of-pocket expenses and collecting a portion of it prior to scheduling the case.
5. Continued use of claim scrubbing software, and further front desk education has continued to positively impact the claims rejection rate of the department. OB/GYN is maintaining a claim rejection rate of 5-7%. The department has also experienced a decrease of outstanding Accounts Receivable greater than 121 days with continued follow-up done by the coding staff and continued monitoring by the Work Unit Leader. The department total of A/R greater than 121 days is below 14%.
6. Continued communication and education with Customer Service has allowed the department to identify financial risks and implement arrangements prior to services being rendered. Education has been further refined to include detailed analysis of price estimating services for the department as well as assisting patients with out of pocket expenses in relation to deductibles and co-insurance amounts.
7. After an internal audit, the Work Unit Leader implemented electronic communication to the faculty, through the current Power chart system, to assure that documentation is complete and compliant for billing purposes. The Work Unit Leader is also assisting the faculty with delinquent documents by reviewing outstanding unsigned documents and is working in collaboration with HIS for resolution of discrepancies. The Work Unit Leader is also working with the residency staff in completion of un-dictated documents, Operative Notes and Discharge Summaries.
8. The Work Unit Leader has continued the contract with Healthcare Receivable Specialists, Inc. (HRSI) to work with the maternity patients who do not have health insurance. This contract has been expanded to include the Nyes Road and Erford Road practices. The HRSI personnel meet with the patient at their home and assist them in receiving coverage for their maternity care.
9. The Work Unit Leader has continued to refine Financial Reports to demonstrate departmental activities, strengths, and opportunities for improvement. These reports are provided to the Chair, Administrator, Operations Director, Ambulatory Medical Director, and all Division Chiefs in the department on a monthly basis.
10. With further refinement of cash collections and claim submission, the Department of Ob/Gyn's Net Collection rate is between 91% - 93%, which is among the top in the institution.

11. The department continues to support PCA staff to maintain their certification status and further their career development.
12. The Work Unit Leader continues to maintain the developed relationship with Professional Financial Services Director, and coordinates a quarterly update from PFS at the Ob/Gyn Executive & Operations Meetings.
13. The coding staff continues to collect data on maternity services for the residency program and also for the 3<sup>rd</sup> Floor Nursing Unit.
14. The coding staff has fully implemented collecting and entering residency services for the ACGME to report resident activity.

### **Department Goals for 2008/2009**

The department is poised to provide the Central Pennsylvania region with exceptional service and a greater capacity for access to its referring physicians and patients. Our goals for the next year include:

1. A new division of Urogynecology and Minimally Invasive Surgery will be implemented in the new fiscal year. This division will include Matthew Davies, M.D., as division chief and Gerald Harkins, M.D. and a physician assistant to be hired to support the physicians. The division will function as a primarily surgical division and will support the Women's Health group with Maternity Night call throughout the year.
2. The outpatient clinic at Cherry Drive, now known as Hope Drive, gained additional examination and procedure rooms with the relocation of the Breast Care Center. Funding has already been granted to purchase equipment in order for the department to start performing Outpatient Hysteroscopy procedures and CMG services.
3. On-going recruitment of a 5th faculty member to the Maternal Fetal Medicine Division. This will create added access for patients and their families to departmental services and expand the sonography capabilities to all patients wishing genetic screening and Nuchal Translucency Screening.
4. The department continues to hold a strong presence at the Erford Road and Nyes Road clinics in the Harrisburg Area. The department has hired two recent resident graduates to assist in providing continued patient care at these offices. Dr. Jaimey Pauli has been hired and will be starting in September, 2008. Dr. Pauli will be primarily located at the Erford Road clinic. Dr. Danielle Hazard will graduate in December, 2008 and will be recruited to start in January, 2009. Dr. Hazard will be recruited to work out of our Nyes Road clinic. We continue to market and grow these service opportunities for our patient population.
5. The department lost one of its Gynecologic Oncologists in June 2008 and is currently recruiting for a replacement. It is anticipated that this will be a hard to find replacement since there are more job vacancies than fellows graduating from programs. The resignation also meant that the Department will no longer have a presence at the Lancaster Women's and Babies office in Lancaster.

6. Dr. Stephanie Estes, Reproductive Endocrinology, has been granted privileges at Harrisburg Hospital in order to utilize robotic surgery technology. This will enable Dr. Estes to offer this technology to her patients which is currently not available at Hershey.
7. Continued marketing of the sites at Erford Road and Nye's Road and emphasis on all our services will be the goal of fiscal year 2008/2009. In 2007/2008 our marketing will continue to include a semi-annual newsletter to be sent to all households in our primary market. This has proven to be a successful avenue of marketing for the department within the last year.
8. We are making continued efforts through University Development to enhance our endowments and gifts for the department. This will also allow the department to provide for new initiatives in our missions of research and education.

The department continues to make significant strides in many areas, and will continue to meet the challenges ahead in 2008/2009. As we continue to meet the clinical, education and research goals, we will aspire to find new and creative avenues while still adhering to the principals and standards of the Penn State Hershey Medical Center.

# STUDENT CLERKSHIP PROGRAM

## Description and Goals:

A core component of the curriculum at the College of Medicine is instruction in Reproductive Medicine and Women's Health at several levels. This culminates in a six-week clerkship in Obstetrics and Gynecology in the third year, administered through the clinical Department of the Milton S. Hershey Medical Center. All students take this course, and must pass to receive their Doctor of Medicine degrees. The course follows the educational objectives laid down by the Association of Professors of Gynecology and Obstetrics in designing a program to give broad exposure to women's health and to focus on details essential to the practice of the specialty

## Syllabus

The course incorporates one day of introductory lectures and presentations on the basics of OB/GYN history taking and examination, and two additional days of lectures from Department faculty on selected topics. The remainder of the six weeks is spent examining and caring for patients in labor and delivery, hospital inpatient wards, the operating room, and the outpatient clinic at one of six clinical teaching sites, under supervision of faculty and residents. Students perform pelvic exams, assist in deliveries and surgery, perform outpatient procedures, write chart notes, and give patient presentations, as well as participate in all of the teaching conferences of their particular institution. Grades are based on clinical evaluations submitted by faculty and residents who have worked with the students and scores on the NBME Subject Examination, administered on the last day of the course. The required textbook is Obstetrics and Gynecology, 5<sup>th</sup> Edition, Beckman, Ling, et al, Philadelphia: Lippincott Williams & Wilkins; 2006.

## Clinical Teaching Sites and Supervisors

Milton S. Hershey Medical Center, Hershey, PA  
Robert L. Yarwood, MD, FACOG (Clerkship Director)  
Assistant: Ms. Cheryl Mathias (Clerkship Coordinator)

Lehigh Valley Hospital, Allentown, PA  
Kristin Friel, MD, FACOG  
Assistant: Ms. Teresa Benner

Mt. Nittany Medical Center, State College, PA  
Angela Hardyk, MD, FACOG

Pinnacle Health at Harrisburg Hospital, Harrisburg, PA  
Norman Navarro, MD, FACOG  
Assistant: Ms. Linda Weldon

Reading Hospital and Medical Center, Reading, PA  
Anton Kleiner, MD, FACOG  
Assistant: Ms. Carolyn Hoffman

York Hospital, York, PA  
Leslie E. Robinson, MD, FACOG  
Assistant: Ms. Robin Kile

### Statistics

For the 2007-2008 academic year, 134 students completed the course. Results were:

<u>Grades</u>	
Honors.....	50
High Pass.....	52
Pass.....	27
Low Pass.....	3
Fail.....	2

<u>NBME Subject Exam</u>		
	<u>P.S.U.</u>	<u>National</u>
mean.....	73.24	72.6
median.....	73	72
s.d.....	7.97	8.2

For the 2008-2009 academic year, 149 students are enrolled in the course.

### Additional Medical School Courses

Department faculty provide lectures and small group leadership in anatomy, physiology, and clinical medicine at the first and second year levels in several courses, and a Department faculty directs the Reproductive Medicine course in the second year curriculum. Department faculty also oversees the integrated instruction in pelvic examination across the four-year experience.

The department offers several four-week electives to 4<sup>th</sup> year medical students. Currently they are:

Gynecologic Oncology, Hershey Medical Center  
Maternal-Fetal Medicine, Hershey Medical Center  
Reproductive Endocrinology, Hershey Medical Center  
Ambulatory and Adolescent Gynecology,  
University Physicians Group, Nyes Road and Cherry Drive  
OB/GYN Externships: Harrisburg Hospital, Lehigh Valley Hospital,  
Reading Hospital, York Hospital, Lancaster Women & Babies Hospital

A new elective in Minimally Invasive Surgery is in development. A faculty mentor specifically supervises all of these courses, and several fulfill the graduation requirement of an acting internship. A total of 17 different students are enrolled in these courses in the current academic year, and additionally 5 students are enrolled in independent studies or research months in OB/GYN at various institutions around the country.

Finally, the Department offers clerkships in outpatient care for Physician Assistant and Nurse Practitioner students from affiliated institutions, scheduled on a case-by-case basis.

### **Mentorship in Obstetrics and Gynecology**

The College of Medicine has had a student-run Interest Group in Women's Health for several years, with faculty advisors drawn from within the Department of OB/GYN. These primarily first- and second-year medical students actively participate in the Lion Care free clinic in Harrisburg, sponsor educational seminars in women's health topics, collect cell phones for donation to a local women's shelter, and organize rally's and other activities centered around addressing domestic and sexual violence. Although not all ultimately pursue a career in Obstetrics and Gynecology, they are all very aware of the importance of reproductive health across all medical specialties.

The Vice-Dean of Education supervises a clinical faculty mentorship program to better guide and support 3<sup>rd</sup> and 4<sup>th</sup> year students as they grapple with planning for their professional futures. Our department provides not only one-on-one mentoring with any and all interested students, we also sponsor group sessions during the year for information exchange on post-graduate training.

These student activities – didactic, clinical, and modeling, both formal and informal – also serve to encourage students to pursue a career in Obstetrics and Gynecology, as well as sub-specialization within Family Medicine and Internal Medicine. Graduating students from the College entering residencies in Obstetrics and Gynecology have represented greater than 5% of their classes:

	<u>Total Graduates</u>	<u>OB/GYN Graduates</u>
Class of 2003	96	5
Class of 2004	116	6
Class of 2005	120	6
Class of 2006	129	10
Class of 2007	127	8
Class of 2008	125	7

The Department is very proud of its contribution to the goals of the American College of Obstetricians and Gynecologists and the Association of Professors of Gynecology and Obstetrics in increasing providers of our specialty, and of heightening awareness of women's health issues among all new physicians.

# RESIDENCY PROGRAM

## Residency Program Staff

Matthew F. Davies M.D., Residency Program Director  
Holly Thomas, M.D., Assistant Residency Program Director  
A. Cheryl Mathias, Residency Coordinator

## Resident Education

The Department of Obstetrics and Gynecology continues to support an outstanding Residency Program for training in the specialty of Obstetrics and Gynecology. With the department's continued growth in the area of general clinical Obstetrics and Gynecology, as well as recent growth in Maternal-Fetal Medicine faculty and ultrasound services, the residents are seeing a greater variety and number of clinical obstetrical cases. This is especially true with respect to the continued increase in deliveries performed at The Penn State Milton S. Hershey Medical Center. In addition, Minimally Invasive Surgery (MIS) has expanded the most in the area of gynecology. Urogynecology services also continue to grow thereby increasing resident exposure.

The 2008-2009 academic year begins with the introduction of an outstanding group of first year residents. This of course is a reflection of the hard work done in recruitment during the 2007-2008 residency interview season. Dr. Matthew Davies continues in his role as Program Director and Dr. Holly Thomas as the Assistant Director. Mrs. A. Cheryl Mathias finishes out the administrative team in her role as the Program Coordinator. This stable team has expanded the program further into the electronic management system utilized by the hospital in other residency programs. New Innovations, the electronic software package, is now being utilized for tracking resident work hours, resident evaluations, and will be utilized this coming year for faculty, curriculum and overall program evaluations.

Following in the footsteps of these changes, we completed an extremely successful interview season. The format was slightly revised and seemed to work well. This was in great part due to outstanding participation by both faculty and residents. The process resulted in a very strong match. Taking five new residents, the program was able to match all five physicians through the NRMP, with three coming from our own medical school.

Formal didactic learning has continued to be a standard and accepted component of resident education. The focus on protecting the residents' time on these Wednesday afternoons is paramount. The Wednesday conferences continue to be a consistent, well-conceived program supervised by various faculty members, including the Chair and the Program/ Assistant Program Director, although changes and variations help the program to grow and remain interesting and current. The afternoon starts with a review of a chapter from a selected textbook. This past year, the residents elected to cover various subspecialty texts. The chapters continue to be reviewed and presented by residents under the direction and supervision of faculty members but format changes are constantly being reviewed for improvements. The chapter review is followed by Chair Rounds, which consists of a discussion of inpatient services led by the department Chairman, Dr. John Repke. The final hour of the afternoon is devoted to various topics including an M&M conference and various lectures on other topics of interest.

Occasionally, the last hour, and often the whole afternoon, is used for special programs or labs. Over the past year, these have included programs to teach laparoscopy and advanced surgical techniques, hysteroscopy and endometrial ablation as well as an anatomy lab using human cadavers. The afternoon concludes with Grand Rounds.

In addition to these protected educational endeavors for all residents, certain services continue to have their own, unique conferences designed to maximize the resident's educational experience on their service. The Gynecology Pre-operative Conference continues to be held on Monday mornings, with Dr. Richard Pees and Dr. Matthew Davies heading this resident presented discussion. The Perinatal Conference occurs on Friday mornings and is organized by the Maternal-Fetal Medicine faculty in conjunction with the Neonatology Faculty. Thursday mornings have several different conferences including the Gynecology/Radiology Conference and a hospital-wide series of lectures covering issues surrounding the ACGME Core Competencies. The Maternal Fetal Medicine faculty has also arranged a joint Obstetrics/Radiology Conference quarterly. All of these educational efforts in addition to the vast clinical experiences have continued to be undertaken easily within the confines of the eighty-hour per week duty restrictions.

Research opportunities and experiences within the department have grown under the direction of Dr. Colin MacNeill. He has offered his time and energy to direction of the mandatory resident research projects. With the upcoming 2008-2009 schedule, it is now organized in such a way that residents have protected time weekly to discuss their projects with Dr. MacNeill and to avail themselves of his expertise to complete these projects. Last years' efforts ended with an outstanding Resident Research Day in conjunction with Graduation Weekend. Our guest speaker, through the Mortel Lectureship, was Dr. John T. Queenan, Professor, Department of Obstetrics and Gynecology at Georgetown University, Washington, D.C.; and Deputy Editor of the Green Journal Obstetrics and Gynecology Publication. The weekend concluded with the graduation of four excellent Obstetrician/Gynecologists, two entering academic practice here at The Penn State Milton S. Hershey Medical Center; one entering an ACGME approved fellowship in Gynecologic Oncology in Irvine, California; and one entering private practice in Butler, Pennsylvania.

Our outside rotations to Pinnacle Health - Harrisburg Hospital have continued to offer the residents an experience not available at The Penn State Milton S. Hershey Medical Center. Four residents are currently assigned to this rotation at any given time, but this number may increase in the future. This rotation presently allows the residents to completely avail themselves of the opportunities and experiences at the community portion of our program; including exposure to a more urban patient population. Dr. Norman Navarro, a Penn State University College of Medicine graduate, continues as the leader of the Harrisburg program. It is expected that he will continue to lead this program, and to optimize this aspect of the residents' education.

Finally, our documentation and evaluation of resident requirements and experiences has been augmented and improved. We have continued to develop the ACGME Core Competencies within Obstetrics and Gynecology, and most recently have developed a program directed to the teaching of these vital areas in the next academic year. Means of assessment and methods of intervention have been developed for five of the six competencies, and will soon be completed and implemented for the whole group. Data keeping has long been a problem in residency programs. Over the past three years, using the Resident Experience Logs, the program has been keeping statistics for the bulk of the residents' experiences. This has been done in conjunction with the billing



department under the direction of Mr. Kevin Haak. While this has taken much of the responsibility for record keeping away from the residents, it is anticipated that this will better allow the program to accurately monitor resident experiences with both procedures and primary care.

In conclusion, the future for the Obstetrics and Gynecology Residency Program continues to look extremely promising at this time. The department continues to increase its clinical activity and continues to seek growth in Maternal-Fetal Medicine as well as Gynecologic Oncology. Experiences in Maternal-Fetal Medicine will be seen not only through rotations with the group at Harrisburg Hospital but also with the expansion of Maternal and Fetal Medicine services here under the leadership of Dr. Serdar Ural. Multiple novel areas are being developed at this time. Educational activities in the simulation laboratory, run by the Anesthesia Department, are already underway and more are scheduled for the future. These will be held in conjunction with both Anesthesia and Nursing to build teamwork and improve systems' functions. Inanimate laparoscopy training under the direction of Dr. Gerald Harkins is likewise in the didactic schedule for the academic year. Protected research time will continue under the supervision of Dr. Colin MacNeill. The program will continue to expand its efforts to deal with record keeping electronically under the direction of the Program Coordinator. Having stable leadership in the program over this past year with individuals already familiar with this program and organization have led to a very successful year. We fully expect that with our faculty's continued commitment to resident education, and the department's ongoing clinical and educational growth, we will attract outstanding residents for training here at The Penn State Milton S. Hershey Medical Center.

## **House Staff**

Danielle Hazard, M.D., PGY4 – Penn State University School of Medicine  
Sangeetha Konda, M.D., PGY4 – Mahadevappa Rampure Medical College  
Jaimey Pauli, M.D., PGY4 – Penn State University School of Medicine  
Thanh Truong, M.D., PGY4 – University of California College of Medicine, Irvine

Corenthian Booker, M.D., PGY3 – Creighton University School of Medicine  
Kimberly Kesler, M.D., PGY3 – University of Maryland School of Medicine  
Julie Messimer, M.D., PGY3 – Saba University School of Medicine  
Sarah Buchanan, M.D., PGY3 – University of Missouri – Kansas City School of Medicine  
Lisa Vigue, M.D., PGY3 – Creighton University School of Medicine

M. Michele Martins, M.D., PGY2 – Medical College of Ohio  
Amber O'Leary, M.D., PGY2 – Penn State University College of Medicine  
Simone Piraino, M.D., PGY2 – Penn State University College of Medicine  
Amanda Wait, D.O., PGY2 – University of Health Sciences (Kansas City University of Medicine and Biosciences)  
Kerri Wenzel, M.D., PGY2 – University of Maryland School of Medicine

Angela Bohr, M.D., PGY1 – Penn State University College of Medicine  
Brooke Halliwell, D.O., PGY1 – University of new England College of Osteopathic Medicine  
Katherine Lupo, M.D., PGY1 – Penn State University College of Medicine  
Sarah McCollester, M.D., PGY2 – Penn State University College of Medicine  
Jennifer Potts, M.D., PGY1 – Northeastern Ohio Universities College of Medicine

## **DIVISION OF GYNECOLOGIC ONCOLOGY**

### **Division of Gynecologic Oncology Staff**

Rodrigue Mortel, M.D., Professor Emeritus  
George J. Olt, M.D., Professor, Division Chief  
Edward S. Podczaski, M.D., Professor  
Ann Gelder, Coordinator of Research Studies  
Susan Bedger, LPN  
Kathleen Shrawder, Division Secretary

### **Overview**

The Division of Gynecologic Oncology provides complete care for women of Central Pennsylvania with pre-malignant and malignant gynecologic diseases, as well as patients with complex surgical problems. As only 790 board certified gynecologic oncologists practice nationwide, our referral area is quite large, extending north from the New York border, south into Maryland, west to Altoona, and east to Reading. Over 500 surgeries were performed by our division and over 6300 patients visits were accomplished during this academic year. This is only a slight reduction in surgeries performed, as well as patients seen, as compared to other years despite losing one of our gynecologic oncologists, Dr. Paul Kramer, as he left the Medical Center at the end of June 2007.

While the majority of patients are seen at the Hershey Medical Center, the division has also maintained an office at the Women's and Babies Hospital in Lancaster, Pennsylvania and on Erford Road in Camp Hill for the past several years. However, with the shortage of faculty in our division with Dr. Kramer's departure in June of 2007 and Dr. Olt's departure in June of 2008, gynecologic oncology services at these practice sites will be discontinued in FY 08/09.

The Division of Gynecologic Oncology plays an active role in the education of both medical students and residents. Third year students rotate weekly on the Gynecologic Oncology service. Five percent of the senior class performed acting internships in gynecologic oncology. First and fourth year residents rotate on the Gynecologic Oncology service obtaining experience in pre-and post-operative care while refining surgical techniques.

The Division of Gynecologic Oncology research endeavors are primarily focused around clinical trials generated both in-house and via national collaborative groups. The Hershey Medical Center is one of 47 parent institutions of the Gynecologic Oncology Group (GOG). Our affiliates are Lehigh Valley Hospital and University of Utah. More than 75 patients were enrolled in clinical trials last year.

## Faculty

### **George J. Olt, MD, Professor**

Medical School: University of Cincinnati, MD – 1984

Residency: Duke University Medical Center, Obstetrics and Gynecology 1984-1988

Fellowship: Duke University Medical Center, Gynecologic Oncology 1988-1991

Research Interests: Biology of ascites formation, role of progesterone in patients with endometrial hyperplasia, the molecular biology of response to therapy of epithelial ovarian cancer.

### **Edward S. Podczaski, MD, Professor (Interim Division Chief)**

Medical School: University of Chicago, Pritzker School of Medicine, MD-1977

Residency: University of Chicago, Obstetrics and Gynecology, 1978-1982

Fellowship: University of Chicago, Gynecologic Oncology, 1982-1984

Research Interests: Endometrial cancer, the role of telomerase expression in cervical cancer.

## Clinical Activities

503	OR Cases @ HMC	
	Dr. Olt	240
	Dr. Podczaski	263
948	New Patient Visits @ HMC	
	Dr. Olt	314
	Dr. Podczaski	634
4185	Return Patient Visits @ HMC	
	Dr. Olt	1468
	Dr. Podczaski	2717
510	Chemo Patient Visits @ HMC	
	Dr. Olt	215
	Dr. Podczaski	295
86	New Patient Visits @ Women's and Babies Hospital	
372	Return Patient Visits @ Women's and Babies Hospital	
31	New Patient Visits @ Erford Road	
249	Return Patient Visits @ Erford Road	
6381	Total Patient Visits	

## Research

Gynecologic Oncology Group Parent Institution with affiliates at Lehigh Valley and University of Utah. (Olt G and Podczaski E – Co-Investigators)

Role of progesterone route of administration in patients with endometrial hyperplasia.  
(Olt G – Investigator)

Progression of HPV-induced human dysplasia. Tobacco Settlement Block Grant.  
(Olt G – Co-Investigator)

### **Teaching**

Tutorials for Third year Medical Students every six weeks

Acting Intern – Fourth Year Medical Student – Rotates every four weeks on Gyn Onc  
Service

Resident Summer Core Lectures:

Podczaski E: “Abnormal Cytology and Colposcopy”  
August 30, 2007

## **DIVISION OF MATERNAL FETAL MEDICINE**

### **Maternal Fetal Medicine Staff**

Serdar H. Ural, M.D., F.A.C.O.G., Associate Professor and Division Chief  
Anthony Ambrose, M.D., F.A.C.O.G., Associate Professor  
John J. Botti, M.D., F.A.C.O.G., Professor and Director of Perinatal Outreach  
Adam Duhl, MD, F.A.C.O.G., Clinical Associate Professor  
John T. Repke, MD, F.A.C.O.G., Professor and Chairman  
Judith Weisz, M.B., B.Chir.  
Patricia Myers, RN-C, Attending Nurse  
Pamela Macrina, RN, Attending Nurse  
Jeanne Miklos, RDMS, Ultrasonographer  
Jonna Bruckhart, RDMS, Ultrasonographer  
Wendy Glatfelter, MS, Genetic Counselor  
Frances Hadley, RD, LDN, CDE, Registered Dietitian  
Judy Grubb, Division Secretary

The Division of Maternal-Fetal Medicine provides complete pregnancy care for women in Pennsylvania. Our division plays an active role in the education of both medical students and residents. Our mission has been to improve pregnancy outcomes through the provision of outstanding clinical care, research, physician training and education, and community service. The division continues to provide daily inpatient and outpatient care at the Hershey Medical Center and fetal diagnostic imaging in the Prenatal Testing Unit. Our division operates on the 3-North facilities that include outpatient, genetic counseling, ultrasound, fetal testing, nutrition counseling and office based procedures. In addition, we do service the Labor and Delivery unit, which is located in the same area.

All of the Maternal-Fetal Medicine subspecialists are double board certified in obstetrics and gynecology and maternal fetal medicine. Our members are the only double board certified Perinatologists by the American Board of Obstetrics and Gynecology in the Central Pennsylvania area.

### **Clinical Care**

The Division of Maternal Fetal Medicine provides comprehensive preconception, consultative and obstetrical care to some healthy but mostly high-risk patients from several counties in Pennsylvania. In FY2007-2008, the Division had 5816 outpatient visits, including 687 consultations. We performed 1321 non-stress tests and/or biophysical profiles. There were 548 consultations, 111 amniocentesis procedures and 34 chorionic villus samplings. The division has begun to offer first trimester screening to the pregnant population in the areas that we serve. We have performed 402 first trimester screenings. The division did perform more than 3743 outpatient ultrasounds. The ultrasound studies included 3D/4D imaging following the purchase of two units with this technology.

Inpatient care included 544 admissions, over 76 transfer patients, and 287 deliveries were performed in collaboration with the Division of Women's Health. With the addition of Dr. Ural as division director, first trimester screening is now being offered to pregnant women in the Central Pennsylvania area by our division. Our goal is to be able to

provide this option to all patients that may desire it. This will enhance patient satisfaction and will meet the patient demand.

The division has recruited a second ultrasonographer in order to open two ultrasound rooms performing examinations on a daily basis. Two ultrasound rooms have been operational since February 2008. Dr. Ural is currently the head of the OB Providers group, who meets once per month to discuss clinical education endeavors to enhance patient care and quality. Dr. Ural also serves as a co-director of the obstetrical newborn nursery collaborative group whom also meets once per month to review clinical/endeavors to improve patient quality.

## **Teaching**

The Division of Maternal Fetal Medicine provides daily clinical teaching and training to residents from the second through fourth years in both inpatient and outpatient settings. These include the Prenatal Testing Unit and inpatient care rotation. The division collaborates with Women's Health to provide labor and delivery supervision two to three days each week, including teaching and training to the residents. The division also provides teaching of third and fourth year medical students, including two fourth year students during the academic year in a Maternal-Fetal Medicine elective externship. An obstetrics/radiology case conference was initiated and will continue.

The Division of Maternal-Fetal Medicine provided several monthly lectures to medical students throughout the academic year. The subjects covered are prematurity, fetal imaging and hypertensive disorders of pregnancy. The division is also responsible for several of the basic OB/Gyn lectures for new residents and students, including management of normal and abnormal labor, and fetal monitoring. The Division of Maternal-Fetal Medicine shared responsibilities with the Newborn Medicine Division for the interdepartmental Perinatal Conference for the 2007-2008 academic year.

Dr. Ural, as the director of the division, participated in medical student lectures, resident education and lectures, as a member of the medical school problem-based learning program.

The division is applying for a formal fellowship program through the American Board of Obstetrics and Gynecology.

## **Faculty**

### **Serdar H. Ural, M.D., F.A.C.O.G., Associate Professor, Division Director, Labor & Delivery Medical Director**

Undergraduate Training: Ankara College High School, Ankara, Turkey 1979-1982  
Ecole Nouvelle de la Suisse, Lausanne, Switzerland, 1981-1986

Medical School: University of Ankara School of Medicine, Ankara, Turkey 1982-1989

Research Fellowship: Maternal Fetal Medicine, Georgetown University School of Medicine,  
Washington, DC –1989-1993

Residency: Obstetrics and Gynecology, State University of New York School of Medicine  
Syracuse, NY 1993-1997

Fellowship: Maternal-Fetal Medicine, The Johns Hopkins University School of  
Medicine, Baltimore, MD 1997-2000

Board Certification: Diplomate, American Board of Obstetrics & Gynecology:  
Maternal Fetal Medicine, and Obstetrics & Gynecology  
Area of clinical focus and research interest: In utero bone marrow transplantation, gene therapy, Rh isoimmunization, prenatal screening, diagnostic and therapeutic techniques.

**Anthony Ambrose, M.D., F.A.C.O.G., Associate Professor**

Undergraduate Training (Engineering): United States Military Academy, West Point, NY  
1964-1968

Medical School: Milton S. Hershey Medical Center, Hershey, PA 1971-1975

Internship and Residency: William Beaumont Army Medical Center, El Paso, TX  
1975-1979

Fellowship: Maternal Fetal Medicine, the University of North Carolina, Chapel Hill, NC  
1982-1984

Board Certification: Diplomate, American Board of Obstetrics & Gynecology:  
Maternal Fetal Medicine and Obstetrics & Gynecology

Area of clinical focus and research interest: Complicated pregnancy, obstetrical ultrasound, fetal diagnosis and therapy.

**John J. Botti, M.D., F.A.C.O.G., Professor, Director of Perinatal Outreach**

Undergraduate Training: University of Notre Dame 1966-1970

Medical School: Albany Medical College of Union University 1970-1974

Residency: University of Pittsburgh School of Medicine, Pittsburgh, PA 1974-1977

Research Fellowship: Maternal Fetal Medicine, University of Pittsburgh School of  
Medicine, Magee-Women's Hospital, Pittsburgh, PA 1977-1979

Research Training: University of Pittsburgh School of Medicine, Magee-Women's  
Hospital 1974-1979

Board Certification: Diplomate, American Board of Obstetrics & Gynecology:  
Maternal Fetal Medicine and Obstetrics & Gynecology

Area of clinical focus and research interest: Infection in pregnancy, exercise in  
pregnancy, improved pregnancy outcomes.

**Adam Duhl, M.D., F.A.C.O.G., Clinical Assistant Professor**

Undergraduate Training: University of Pennsylvania, Philadelphia, PA,  
*Magna Cum Laude* 1985-1989

Medical School: The University of Connecticut School of Medicine, Farmington, CT  
1989-1993

Residency: Pennsylvania Hospital, Philadelphia, PA 1993-1997

Fellowship: Maternal Fetal Medicine, The Johns Hopkins Hospital, Baltimore, MD  
1997-2000

Board Certification: American Board of Obstetrics and Gynecology: Obstetrics and Gynecology  
and Maternal-Fetal Medicine

Area of clinical focus and research interest: Biomedical ethics, thrombophilias in  
pregnancy and contraception, spiral CT to diagnose fetal congenital  
diaphragmatic hernia.

**John T. Repke, M.D., F.A.C.O.G., Professor and Chairman**

Undergraduate Training: Georgetown University, Washington, D.C. – 1974

Medical School: New York Medical College, New York, NY – 1978

Residency: The Johns Hopkins Hospital, Baltimore, MD – 1978-1982

Fellowship: Maternal Fetal Medicine, The Johns Hopkins Hospital, Baltimore, MD – 1982-1984

Board Certification: Diplomate, American Board of Obstetrics & Gynecology:  
Maternal Fetal Medicine, and Obstetrics & Gynecology

Area of clinical focus and research interest: High-risk pregnancy, pre-eclampsia and hypertension, and medical complications of pregnancy.

**Recruitment**

The division has begun an active search for an additional maternal fetal medicine specialist to join the division and faculty.

**Grants and Contracts**

Dr. Botti is co-investigator of the Health Thematic Initiative Fund Award, CePAWHS Phase I Obesity Data Dissemination Program, 07/01/07 – 06/30/08, \$25,000. Dr. Botti is Administrator of the Isabel Cate Rineer Memorial Endowment in Perinatology. Dr. Ural is applying for a grant to investigate iron levels in pregnancy along with Dr. James Conner, Neurosurgery.

**Service to the University and Community**

Dr. Ambrose continues service as a Hershey campus member of the Faculty Senate, which meets monthly during the academic year. He is also extensively involved in the admissions interview and selection program for the students and the College of Medicine.

Dr. Botti continues service with the MSHMC with the Ultrasonography Committee and is a member of the Kienle Humanities Committee through the Department of Humanities.

**Perinatal Outreach**

During FY 2008, the Division of Maternal Fetal Medicine continued it's collaboration with the Division of Newborn Medicine to share information and provide resources to area practices and hospitals with either level I nurseries or level II pre and post neonatal intensive care units. Visits were completed to State College, Lebanon, Wilkes-Barre, and Waynesboro. There was an upsurge of outpatient referrals of pregnant women with complex maternal or fetal problems from each of the three maternal fetal medicine practices in the Lower Susquehanna area (Harrisburg, York, and Lancaster), including several maternal and fetal cardiac disorders, and an unusual number of patients with either Rh alloimmunization or severe fetal parvovirus exposures. This was, in part, due to changes in personnel at some of these referral sites.

In FY 2008, our team effort was associated with approximately 150 maternal admissions, and approximately 160 NICU admissions including 40 newborn surgical specialty interactions.



The interaction with Wyoming Valley Health System in Wilkes-Barre initiated in 2007 was a dynamic evolution into close liaison with the hiring of Dr. Adam Duhl as the maternal fetal medicine consultant by WVHS, with academic credentialing by the Penn State M.S. Hershey Medical Center. By the end of FY 2008, WVHS decided to pursue a separate approach to comprehensive perinatal health care services that no longer included PSHMC as the default transport and referral site.

The team outreach effort remains a key tool for our division, in conjunction with Newborn Medicine to maximize referral and transport of the most affected pregnancies in the region.

### **Goals for FY 2008-2009**

1. Recruitment of an additional faculty member to the Division of Maternal Fetal Medicine.
2. Enhance and enlarge the 3N clinical area to be able to provide all necessary perinatal services based on patient demands and referring Ob offices.
3. Continue interaction with residents for research projects, as well as develop a broad relationship with Central Pennsylvania Center of Excellence for pregnancy outcome program.
4. Availability to run three ultrasound rooms performing obstetrical ultrasound and procedures that are in demand by our patients, enhancing our consultative capabilities.
5. Increasing our perinatal outreach to additional areas, including Lebanon, Ephrata, Lititz, Lancaster, State College, and Waynesboro.
6. Continue to offer first trimester screening to all pregnant women in the area.
7. Formal application for a Maternal Fetal Medicine Fellowship program underway.

### **Publications (Peer and Non Peer Reviewed)**

#### **Serdar H. Ural, M.D., F.A.C.O.G.**

Chuang C, Green M, Chase G, Dyer AM, **Ural SH** and Weisman C. Perceived risk of preterm and low birthweight in the Central Pennsylvania Womens Health Study. Am J Ob Gyn 2007; 64e1.

Merriman Jennifer B, Gonzalez Juan M, Rychik Jack, and **Ural Serdar H.** Can Digoxin and Sotalol Therapy for Fetal Supraventricular Tachycardia and Hydrops be Successful? J Reprod Med 2008; 53:357-59.

Duhl A, Paidas MJ, **Ural SH**, Branch W, Casele H, Cox-Gill J, Hamersley SI, Hyers TM, Katz V, Kuhlmann R, Netescu EA, Thorp JA and Zehnder JL. Antithrombotic therapy and pregnancy: Consensus report and recommendations for prevention and treatment of venous thromboembolic and adverse pregnancy outcomes. Am J Ob Gyn 2008; 457.

### **Abstract Presentations**

**Ural S**, Deren O, Onderoglu L, Parry S, Yigit S, Ozyuncu O, Durukan T. Does Preterm Premature Rupture of Membranes of One Twin Affect Outcomes with Twin Gestation? Presented at the Society for Maternal Fetal Medicine 2007 27<sup>th</sup> Annual Meeting in San Francisco, CA February 2007

Cynthia H. Chuang MD MSc, **Serdar H. Ural MD**, Michael J. Green MD MS, Gary A. Chase PhD, Carol S. Weisman PhD. Perceived Risk of Preterm and Low Birthweight Birth in the Central Pennsylvania Women's Health Study. Poster Presentation at the 28<sup>th</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008.

### **Chapters and Reviews**

**Serdar H. Ural**. In: National Med Series for Independent Study: Obstetrics & Gynecology, 6<sup>th</sup> ed. Chapter 2: Fetal Physiol, page 11, 2008.

**Serdar H. Ural**, Emmanuelle Paré. In: National Med Series for Independent Study: Obstetrics & Gynecology, 6<sup>th</sup> ed. Chapter 8: Abuse in Pregnancy, page 81, 2008.

### **Invited Lectures**

"Antiphospholipid Antibody Syndrome"

Turkish Obstetrics and Gynecology Association, National Training Symposium (CME)  
October 26, 2007 -Antalya, Turkey

"4-D Ultrasonography in Pregnancy"

Turkish Obstetrics and Gynecology Association, National Training Symposium (CME)  
October 27, 2007 - Antalya, Turkey

"Amniocentesis or CVS"

Turkish Obstetrics and Gynecology Association, National Training Symposium (CME)  
October 28, 2007 - Antalya, Turkey

"Antiphospholipid Antibody Syndrome and Pregnancy"

Grand Rounds, Department of Obstetrics & Gynecology, Penn State Hershey Medical Center

January 23, 2008 - Hershey, Pennsylvania

"Placental Abnormalities"

Labor & Delivery nurse education, MSHMC  
April 3, 2008 – Hershey, PA

“HSV and Pregnancy”

Grand Rounds, Department of Obstetrics & Gynecology, Mt. Nittany Medical Center  
April 10, 2008 - State College, Pennsylvania

“Prediction and Treatment of Preterm Labor and Delivery in Symptomatic and Asymptomatic Women”

Controversies in Perinatal medicine: Evidence Based Solutions, ACOG postgraduate course  
May 3, 2008 - New Orleans, Louisiana

“Prenatal Screening: What Method is Best and What do the Data Really Show?”

Controversies in Perinatal medicine: Evidence Based Solutions, ACOG postgraduate course  
May 3, 2008 - New Orleans, Louisiana

“Stem Cell Transplantation”

Round Table Lecture, ACOG Annual Clinical Meeting  
May 5, 2008 - New Orleans, Louisiana

“3D Ultrasound and Pregnancy”

Controversies in Perinatal medicine: Evidence Based Solutions, Round Table Lecture, ACOG Annual Clinical Meeting  
May 6, 2008 - New Orleans, Louisiana

“Antiphospholipid Antibody Syndrome and Pregnancy”

Grand Rounds, Department of Obstetrics & Gynecology, Pinnacle Health  
June 19, 2008 - Harrisburg, Pennsylvania

“Osteochondrodysplasias”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MS Hershey Medical Center  
June 20, 2008 - Hershey, Pennsylvania

### **John J. Botti, M.D., F.A.C.O.G.**

#### **Publications (Peer and Non Peer Reviewed)**

Gaylord M, Greer M and **Botti J.** *Commentary Improving perinatal health: a novel approach to improve community and adult health.* J Perinatol 28:91-96, 2008.

#### **Abstract Presentations**

**Botti J,** Jones R. Maternal Thermoregulatory Responses to Aerobic Exercise During Pregnancy. Poster Presentation, 28<sup>h</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008.

Cheung Esther, Goldenberg David, **Botti John J.** Advanced Oral Tongue Cancer in a 22-year old Pregnant Female. Triological Society Eastern Section Meeting, Philadelphia, PA, January 2008.

## **Invited Lectures**

“Substance Abuse in Pregnancy”

WIC, PA state agency staff meeting (non CME)

September 13, 2007 – Harrisburg, PA

“Trauma in Pregnancy: Current Concepts”

Penn State Trauma Symposium, MSHMC (CME)

September 14, 2007 - Grantville, PA

“Morbidity & Mortality (2<sup>nd</sup> qtr 2007)”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

September 21, 2007 – Hershey, PA

“CePAWHS Phase I Obesity Data Dissemination Program:

Relevant Findings in Central Pennsylvania Reproductive-Age Women”

Health Thematic Initiative Forum, Penn State University

September 24, 2007 - State College, PA

“Late Preterm Birth: Realities and Issues”

Grand Rounds, Department of Obstetrics & Gynecology, MSHMC (CME)

September 26, 2007

“Near Term Pregnancy: What really happens to those kids?”

National Perinatal Association Annual Meeting, New Beginnings for Perinatal Health:

Medical, Social and Community Integration, breakout session (CME)

September 28, 2007 – New Orleans, LA

“Late and Preterm Births”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

October 5, 2007 – Hershey, PA

“Late Preterm Births”

Mount Nittany Medical Center, Department of Obstetrics & Gynecology (CME)

November 8, 2007 – State College, PA

“Trauma in Pregnancy”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

November 9, 2007 – Hershey, PA

“Update on Drug Use by Mothers in Pregnancy and the Affect on the Babies”

Waynesboro Hospital Outreach Program (CME)

November 26, 2007 – Waynesboro, PA

“Morbidity & Mortality (3<sup>rd</sup> qtr 2007)”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

November 30, 2007 – Hershey, PA

“Pandemic Influenza in Pregnancy”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
December 14, 2007 – Hershey, PA

“Prevention of Premature Labor”  
Department of Obstetrics & Gynecology, Good Samaritan Hospital Outreach Program  
(CME)  
December 27, 2007 – Lebanon, PA

“Perinatal Case Review: Pathology”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
February 15, 2008 – Hershey, PA

“Perinatal Case Review”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
February 29, 2008 – Hershey, PA

“Morbidity & Mortality (4th qtr 2007)”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
March 7, 2008 – Hershey, PA

“SMFM 2007 Meeting Highlights”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
April 4, 2008 – Hershey, PA

“Prevention of Cesarean Associated Infections”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
May 23, 2008 – Hershey, PA

## **Publications (Peer and Non Peer Reviewed)**

**Anthony Ambrose, M.D., F.A.C.O.G.**

### **Invited Lectures**

“Pregnancy and Arthritis”  
Arthritis Foundation, 2007 Juvenile Arthritis Conference: Young Adult Breakout Session  
Moderator (CME)  
July 3, 2007 – Hershey, PA

“CIS: IUFD”  
Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC  
(CME)  
October 26, 2007 – Hershey, PA

“Obstetrical Ultrasound Basics”

8<sup>th</sup> Annual Pediatric Conference: Touching the Future of Children Conference, MSHMC (CME)

November 6, 2007 – Harrisburg, PA

“Highlights of the 2007 ISUOG Conference”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

January 25, 2008 – Hershey, PA

“Not Your Usual Medication in Pregnancy”

Grand Rounds, Department of Obstetrics & Gynecology, MSHMC (CME)

February 13, 2008 – Hershey, PA

“Perinatal Case Review”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

February 15, 2008 – Hershey, PA

“The U.S. Congress and Ob/Gyn”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

April 18, 2008 – Hershey, PA

“M & M (1<sup>ST</sup> Qtr 2008)”

Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME)

June 6, 2008 – Hershey, PA

### **John T. Repke, M.D., F.A.C.O.G.**

#### **Publications (Peer and Non Peer Reviewed)**

**Repke JT.** Metformin for gestational diabetes: As safe and effective as insulin? OBG Management 2008;20:18

#### **Chapters and Reviews**

Barbieri RL, **Repke JT.** Medical disorders during pregnancy. Harrison's Principles of Internal Medicine, 17<sup>th</sup> Ed. Pp. 44-9. McGraw Hill, New York 2008

**Repke, JT.** External cephalic version for breech presentation with or without spinal analgesia in nulliparous women at term: A randomized controlled trial. Obstetric Anesthesia Digest 2008;28:180-1

#### **Invited Lectures**

The Margaret Williams Endowed Lecture. An evidence based approach to the management of mild and severe preeclampsia. 34<sup>th</sup> Annual Regional Perinatal Symposium. State University of New York – Upstate Medical University. October 18, 2007, Syracuse, NY.

Severe Preeclampsia; Etiology, diagnosis, management and recurrence. Women's Health Summit; Hilton New York. May 15-16,2008, New York, NY

Visiting Professor – Colegio Mexicano de Especialistas en Ginecología y Obstetricia, A.C.; Curso Internacional Medicina Materno-Fetal. May 28-31, 2008, Mexico City, Mexico

Course Director: Controversies in Perinatal Medicine; Evidence-Based Solutions. SA 060 Post Graduate Course; American College of Obstetricians and Gynecologists Annual Clinical Meeting, May 3, 2008, New Orleans, LA

## PERINATAL CONFERENCE SCHEDULE SEPTEMBER 2007 - JUNE 2008

<u>Date</u>	<u>Svc</u>	<u>Speaker</u>	<u>Topic</u>
7-Sep-07	N	Shocker, Campbell, Winger	PA Breastfeeding Awareness and Support Grant Outcomes
14-Sep-07	N	E. Michael, T. Palmer	NICU Rounds
21-Sep-07	O	Botti, T. Palmer, Palmer	C. M&M (2nd qtr 2007), (Patient Safety CME Credit)
28-Sep-07	O	E. Kennedy	Patient Preparation for Life Lion Transport
5-Oct-07	O	Botti	Late Preterm Births
12-Oct-07	N	Kresch	NICU Rounds
19-Oct-07	N	Mujisce	NICU Statistics: Vermont Oxford Data Review
26-Oct-07	O	Ambrose	CIS: IUFD
2-Nov-07	N	Javier	At the limits of viability: Where we were..where we are..and where we're headed
9-Nov-07	O	Botti	Trauma in Pregnancy
16-Nov-07	N	Kresch	Perinatal Ethics
23-Nov-07	I	All attendings	730A Informal Discussion (Holiday)
30-Nov-07	O	Mujisce, Botti	M&M (3rd qtr 2007), (Patient Safety CME Credit)
7-Dec-07	N	Marks, C. Palmer, Kresch	Hot Topics Conference Highlights
14-Dec-07	O	Botti	Pandemic Influenza in Pregnancy
21-Dec-07	I	All attendings	730A Informal Discussion (Holiday)
28-Dec-07	I	All attendings	730A Informal Discussion (Holiday)
4-Jan-08	I	All attendings	r/s to Jan 18 due to electronic problems
11-Jan-08	O	D.N. Saller -UVA	Sonographic Markers for Fetal Chromosomal Abnormalities
18-Jan-08	N	Marks	Directions in Newborn Medicine - The Future
25-Jan-08	O	Ambrose	Highlights of the 2007 ISUOG Conference



## PERINATAL CONFERENCE SCHEDULE SEPTEMBER 2007 - JUNE 2008, (CONT.)

Date	Svc	Speaker	Topic
1-Feb-08	I	All attendings	730A Informal Discussion (SMFM Annual Mtg Jan 28-Feb 2, 2008)
8-Feb-08	N	Kresch, T. Palmer	NICU Rounds
15-Feb-08	O	JJB, A.A., Marks, C.Palmer	Perinatal Case Review: Pathology
22-Feb-08	N	Barretto	Low Birth Weight Infant: Prematurity or Fetal Growth Restriction
29-Feb-08	O	Botti, Mujsce	Perinatal Case Review
7-Mar-08	N	Mujsce, Botti, Barretto	M&M (4th qtr 2007), (Patient Safety CME Credit)
14-Mar-08	O	Sell	Microarray Technology in Prenatal Diagnosis
21-Mar-08	I	All attendings	730A Informal Discussion (Holiday)
28-Mar-08	N	Jack Myers	Ductal Dependent Congenital Heart Defects
4-Apr-08	O	Botti	SMFM 2007 Meeting Highlights
11-Apr-08	N	T. Palmer	Neonatal Hypo- and Hyperthermia In the Delivery Room Setting
18-Apr-08	O	Ambrose	The U.S. Congress and Ob/Gyn
25-Apr-08	N	Shenberger	Congenital Diaphragmatic Hernia (CHD)
2-May-08	I	All attendings	730A Informal Discussions (SPR Annual Meeting May 3-6, 2008)
9-May-08	O	All attendings	730A Informal Discussion
16-May-08	N	Michael	How to Score
23-May-08	O	Botti	Prevention of Cesarean Associated Infections
30-May-08	N	All attendings	Informal Case Review
6-Jun-08	O	AA, DM, CJ, EM	M&M (1st qtr 2008) (Patient Safety CME Credit)
13-Jun-08	N	Hulse	Perinatal Imaging
20-Jun-08	O	Ural	Osteochondrodysplasias
27-Jun-08	I	All attendings	Perinatal Outreach

## **DIVISION OF REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY**

### **Reproductive Endocrinology Staff:**

Courtney Murray, C.N.M.  
Joni McCrady, R.N.  
Cherita Lynch, Secretary  
Jeri V. Miller, Embryologist  
Janis M. Moessner, ELD (ABB) Embryologist and IVF Lab Director  
Jamie Ober, R.N., Special Projects Coordinator  
Barbara Scheetz, Andrology Technologist  
Sandy Eyer, Associate Project Coordinator  
Emily George, Lab Intern  
Patricia Rawa, Special Projects Coordinator

### **Physicians**

#### **William C. Dodson, M.D., Professor and Division Chief**

Dr. Dodson is Chief of the Division of Reproductive Endocrinology and Infertility and Professor of Obstetrics and Gynecology in the College of Medicine. He graduated from Temple University School of Medicine and completed his residency in obstetrics and gynecology and fellowship in reproductive endocrinology at Duke University. Dr. Dodson is board-certified in obstetrics and gynecology and in reproductive endocrinology. He has been a member of the faculty at the College of Medicine since 1990. His areas of clinical focus include ovulation induction, assisted reproductive technology, and disorders of development of the female reproductive tract.

#### **Stephanie J. Estes, M.D., Assistant Professor**

Dr. Estes is Assistant Professor of Obstetrics and Gynecology in the College of Medicine. She graduated from Penn State College of Medicine and completed her residency in obstetrics and gynecology at Abington Memorial Hospital. She completed her fellowship in reproductive endocrinology at Brigham and Women's Hospital. Dr. Estes is board certified in obstetrics and gynecology and an active candidate for certification in reproductive endocrinology. She has been a member of the faculty at the College of Medicine since 2007. Her areas of clinical focus are minimally invasive surgery and fertility preservation.

#### **Carol L. Gnatuk, M.D., Assistant Professor**

Dr. Gnatuk is Assistant Professor of Obstetrics and Gynecology in the College of Medicine. She graduated from the University of Pittsburgh Medical School and completed her residency in obstetrics and gynecology at the University of Medicine and Dentistry of New Jersey. She completed her fellowship in reproductive endocrinology at the Mayo Clinic. Dr. Gnatuk is board certified in obstetrics and gynecology and an active candidate for certification in reproductive endocrinology. She has been a member of the

faculty at the College of Medicine since 1991. Her areas of clinical focus are andrology, sperm donation, and endocrine disorders of menopause.

### **Richard S. Legro, M.D., Professor**

Dr. Legro is Professor of Obstetrics and Gynecology in the College of Medicine. He graduated from Mt. Sinai School of Medicine of New York University and completed his residency in obstetrics and gynecology at Magee-Women's Hospital in Pittsburgh. He completed his fellowship in reproductive endocrinology at the University of Southern California. Dr. Legro is board certified in obstetrics and gynecology and in reproductive endocrinology. He has been a member of the faculty in the College of Medicine since 1993. His areas of clinical focus include polycystic ovary syndrome, ovulation induction, obesity, and uterine leiomyomas.

### **Accomplishments for 2007-2008**

#### **Clinical Reproductive Endocrinology and Infertility**

Dr. Dodson was an examiner for the American Board of Obstetrics and Gynecology. Dr. Legro was an examiner for the Reproductive Endocrinology Section of the American Board of Obstetrics and Gynecology.

Dr. Legro and Dr. Dodson were selected for the Best Doctors in America. Dr. Legro was listed in America's Top Doctors Consumer Health Guide.

### **Research and Education**

Dr. Dodson was the ASRM Postgraduate Program Committee Chairman.

Through Dr. Legro's efforts the Division of Reproductive Endocrinology and Infertility has secured NIH funding for a collaborative study with investigators at the University of Pennsylvania entitled, "Treatment of Insulin Resistance vs. Hyperandrogenism in Infertile PCOS Women". Additionally, he is a key investigator in a project entitled "Hyperandrogenism and Insulin Resistance in the Ontogeny of Polycystic Ovary Syndrome", a component of a U54 led by investigators at VCU. .

Dr. Legro was also a member of the editorial boards for *Journal of Clinical Endocrinology and Metabolism*, *Seminars in Reproductive Medicine*, and *Endocrine Reviews*.

The division has second-year residents in Obstetrics and Gynecology participate in all aspects of clinical care. Additionally, students in all four years of study at the Penn State College of Medicine are taught by members of the division.

The division continues to participate in patient-oriented education seminars throughout the local community.

## **Clinical Activity**

Sessions Attended by Physicians

958, with at least one session every day, seven days per week.

New Patient Visits

985

Return Patient Visits

5904

Ultrasound Examinations

2772 Gyn and early Ob ultrasound examinations

Surgical cases

95 inpatient and outpatient cases

2 laparoscopic myomectomies

8 laparoscopic tubal anastomoses

ART cycles

65 cycles initiated

55 oocyte retrievals

15 pregnancies delivered or ongoing (23% per cycle started)

12 single

2 twin

1 triple

35 cryopreserved embryo transfers (11 ongoing or delivered pregnancies,  
9 single, 2 twin)

## **Educational Activity**

Lectures

Medical Students

Second year students

“Physiology of Reproduction”

Third year students (each block)

“Infertility”

“Menstrual Cycle and Amenorrhea”

“Menopause”

Mentor 1-2 students every other rotation

Mentor 2-3 students each summer in clinical research

“Introduction to the Pelvic Exam”

#### Ob Gyn Residents

- “Spontaneous Abortion and Ectopic Pregnancy” (Legro)
- “Endometriosis: the Funny but not Amusing Disease” (Gnatuk)
- “Recurrent Pregnancy Loss Workup” (Gnatuk)
- “Treatment of Menopausal Symptoms” (Gnatuk)
- “Mullerian Abnormalities” (Dodson)

#### Other Departmental Teaching

- “Applications of MRI focused ultrasound and Robotic surgery in GYN”  
Grand Rounds, January 30, 2008 (Estes)

#### **Invited Lectureships**

Speaker, “PEARLS IN REPRODUCTIVE ENDOCRINOLOGY FOR THE GENERALIST” “If You Know PCOS You Know All of Reproductive Endocrinology” Course for Residents. 63<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, Washington D.C. October 14, 2007. (Legro)

Speaker, “Diagnostic Considerations in PCOS” and “Lessons for the Treatment of PCOS from PPCOS” Update in PCOS by PCOStrategies, Asheville, N.C., Oct. 27, 2007. (Legro)

Speaker, “Considerations for the Evaluation and Management of Polycystic Ovary Syndrome”, PRI-Med Updates in Women’s Health, Chicago, IL, Nov. 3, 2007. (Legro)

Visiting Professor, Indiana University School of Medicine, "The Role of Insulin Sensitizers in the Management of Infertility in PCOS" Grand Rounds, Dept Ob/Gyn, and "Family Studies in PCOS- Where We Have Been and Where We Are Going?" Grand Round Dept Peds Endo. November 28, 2007. (Legro)

Grand Rounds. Dartmouth Medical School Hitchcock Medical Center. “Metformin for Infertility: The Ongoing Saga”. February 21, 2008. (Legro)

Grand Rounds, Division of Medical Endocrinology, Cornell University School of Medicine, New York, NY, March 5, 2008 (Legro)

Palladino Memorial Lecture, Annual Ob/Gyn Resident Research Day, Dept of Ob/Gyn, West Virginia School of Medicine, Morgantown, WV, March 14, 2008. (Legro)

American Association of Clinical Endocrinologist’s Georgia Meeting, “Metformin in PCOS: Going, Going, Gone”. Atlanta CA, March 16, 2008. (Legro)

Physician’s Group Grand Rounds, “The role of Metformin in the Treatment of PCOS” Carlisle Regional Medical Center, Carlisle PA, May 30, 2008. (Legro)

Visiting Professor, Resident Research Day, Lehigh Valley Hospital, “First Line Infertility Therapy to Treat Women with PCOS” Allentown, PA, June 6, 2008. (Legro)

Speaker, Midwest Reproductive Symposium, “Pretreatment of Hyperandrogenism Prior to Infertility Treatment”. Chicago, IL, June 7<sup>th</sup>, 2008. (Legro)

Scientific Committee and Organizer, XVIth Ovarian Workshop, San Antonio Texas, July 19-23<sup>rd</sup>, 2007 (Legro)

Speaker, "Treating Infertility in PCOS with Metformin, Clomiphene, or Aromatase Inhibitors", "Selection of Patients for Infertility Treatments", "Newer Treatments to Induce Ovulation in Women with PCOS", XLIV Annual Meeting of the Asociacion Mexicana de Medicina de la Reproduccion, A.C., Puerto Vallarta, Mexico, July 25-28<sup>th</sup>, 2007 (Legro)

Scientific Committee and Organizer, 2<sup>nd</sup> Peacocks Forum, Castello di Spaltenna, Tuscany Italy, September 20-23<sup>rd</sup>, 2007 (Legro)

Faculty Member, Postgraduate Course: "Polycystic Ovary Syndrome: Improving Reproduction and Pregnancy Outcomes", 63<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, Washington D.C. October 13, 2007. (Legro)

Speaker, Symposium "ASRM/ESHRE Consensus on Treatment of PCOS for Infertility". 63<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, Washington. D.C. October 16, 2007. (Legro)

Speaker, "State of the ART Management of PCOS", District VII Annual Meeting of the American College of Obstetricians and Gynecologists, Oct 27, 2007, Henderson, NV. (Legro)

Speaker "Where Do Insulin Sensitizing Agents Fit in the Management of PCOS" at "Polycystic ovary syndrome: A Condition of our Time" at the Royal College of Obstetricians and Gynecologists, London, UK Nov 15-16, 2007 (Legro)

Speaker "Update on the Pathophysiology of PCOS" and "Role of Metformin as First Line Therapy in Ovulation Induction" at Polycystic Ovary Syndrome: From Reproductive Disorders to Metabolic Disturbances, Medical Congress on the Auspicious Occasion of His Majesty's the King's 80<sup>th</sup> Birthday Anniversary, Bangkok Convention Centre at Central World, Jan 31-Feb 1, 2008. (Legro)

Speaker and Moderator, "Trials and Tribulations of Clinical Trials" in Mini-Symposia: Epidemiology/Clinical Trials. 59<sup>th</sup> Annual Meeting of the Society for Gynecologic Investigation, San Diego CA, March 27<sup>th</sup>, 2008. (Legro)

Plenary Speaker "Role of Metformin in Managing Adolescents with PCOS" in "Polycystic Ovary Syndrome: Molecules to Models to Medicines", Pediatric Academic Society/Lawson Williams Parker Endocrine Society State of the Art Plenary, Honolulu, HI, May 5, 2008. (Legro)

Speaker and Moderator "Algorithms for the Management of Anovulatory Infertility: What is the First Line Treatment?" 7<sup>th</sup> Annual Meeting of the Mediterranean Society for Reproductive Medicine, May 17, 2008, Hammamet, Tunisia (Legro)

Speaker, The Diagnosis of PCOS- Meet the Professor 96<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, June 15, 2008. (Legro)

Chair, Symposia "The Genetics of Uterine and Ovarian Neoplasia", 96<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, June 15, 2008. (Legro)

## **Publications**

### **Peer-reviewed**

Legro RS, Barnhart HX, Carson SA, Diamond MP, Carr BA, Schlaff WD, Coutifaris C, MCGovern PG, Cataldo N, Giudice L, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, and Myers ER for the Cooperative Multicenter Reproductive Medicine Network. Clomiphene, metformin, or both for infertility in polycystic ovary syndrome. *N Engl J Med* 356:551-624, 2007.

Legro RS. Clinical Crossroads: A 27-year-old with a diagnosis of Polycystic ovary syndrome. *JAMA*, 297:509-19, 2007.

Legro RS, Zaino R, Demers L, Kunselman AR, Gnatuk CC, Williams NI, Dodson, WC. The effects of metformin and rosiglitazone, alone and in combination, on the ovary and endometrium in polycystic ovary syndrome. *Am J Obstet Gynecol* 196:402.e1-10; discussion 402.e10-1, 2007.

Trussell JC, Legro RS. "Erectile dysfunction: does insulin resistance play a part?" *Fertil Steril* 88:771-78, 2007 [Epub May 11, 2007].

Norman RJ, Dewailly D, Legro RS, Hickey TE, Lancet Seminar "Polycystic ovary syndrome." *Lancet* 370(9588):685-97, 2007.

Leppert PC, Legro RS, Kjerulff KH. Hysterectomy and loss of fertility: responses of premenopausal women enrolled in the Maryland Women's Health Study regarding the desire for another child. *J Psychosom Med* 63:269-74, 2007; [Epub Aug 2, 2007].

Legro RS, Myers ER for the Cooperative Multicenter Reproductive Medicine Network. Treating Infertility in the Polycystic ovary syndrome. *N Engl J Med* 356:1999-2001, 2007.

Legro RS, Polycystic ovary syndrome and infertility--Reply *JAMA* 297:2583, 2007. Urbanek M, Sam S, Legro RS, Dunaif A. Mapping of a polycystic ovary syndrome susceptibility locus to the fibrillin-3 gene on chromosome 19 p13.2 and association of the variant with a metabolic phenotype. *J Clin Endocrinol Metab* 92:4191-8, 2007; [Epub Sep 4, 2007].

Pauli EM, Legro RS, Kunselman AR, Dodson WC, Lee PA. Diminished paternity and male gonadal function with increasing obesity. *Fertil Steril* 2008 Feb 19; [Epub ahead of print]

Katcher HI, Kunselman AR, Gillies PJ, Demers LM, Bagshaw DM, Legro RS, Kris-Etherton PM. The effects of a whole grain enriched hypocaloric diet on cardiovascular disease risk factors in men and women with metabolic syndrome. *Am J Clin Nutr* 87:79-90, 2008.

Legro RS, Carson SA, Diamond MP, Schlaff WD, Carr BR, Carson SA, Coutifaris C, McGovern PG, Cataldo N, Giudice L, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Spielman RS, Ewens KG, Barnhart HX, Myers ER. Ovulatory response to treatment of polycystic ovary syndrome is associated with a polymorphism in the STK11 gene. *J Clin Endocrinol Metab.* 2007 Nov 13; [Epub ahead of print]

Sweet S, Legro RS, Coney PJ. a comparison of methods and results in recruiting white and black women into reproductive studies: the Meharry-Penn State University Cooperative Center on Reproduction experience. *Contemporary Clinical Trials* 2007 Nov 22; [Epub ahead of print].

Legro, RS, Pauli JG, Kunsleman AR, Meadow JW, Kesner JS, Zaino RJ, Demers LM, Gnatuk CL, Dodson WC. Effects of continuous versus cyclic oral contraception on vaginal bleeding. *J Clin Endocrinol Metab* 2007 Dec 4; [Epub ahead of print].

Sam S, Sung YA, Legro RS, Dunaif A. Evidence for pancreatic beta-cell dysfunction in brothers of women with polycystic ovary syndrome. *Metabolism* 57:84-9, 2008

McGovern PG, Carson SA, Barnhart HX, Myers ER, Legro RS, Diamond MP, Carr BR, Schlaff WD, Coutifaris C, Cataldo NA, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Giudice LC; For the NICHD-Reproductive Medicine Network. Medication adherence and treatment success in the National Institute of Child Health and Human Development-Reproductive Medicine Network's Pregnancy in Polycystic Ovary Syndrome trial. *Fertil Steril.* 2007 Dec 13; [Epub ahead of print].

Katcher HI, Kunselman AR, Dmitrovic R, Demers LM, Gnatuk GL, Kris-Etherton PM, Legro RS. Comparison of hormonal and metabolic markers after a high-fat, Western meal compared with a low-fat, high-fiber meal in women with polycystic ovary syndrome. *Fertil Steril* 2008 Mar 8; [Epub ahead of print]

Kent SC, Gnatuk CL, Kunselman AR, Demers LM, Lee PA, Legro RS. Hyperandrogenism and Hyperinsulinism in Children of Women with Polycystic ovary syndrome: A Controlled Study. *J Clin Endocrinol Metab.* 2008 Feb 12; [Epub ahead of print]

Dykes TM, Siegel C, Dodson WC Congenital uterine anomalies: review and self-assessment module. *AJR*, 189:S1-S10, 2007

Booker CJ, Yarwood RL, Dodson WC. Dislodged Essure microinsert. *Fertil Steril*, 89:964, 2008

### **Non Peer-reviewed**

Legro RS. Pregnancy considerations in Polycystic ovary syndrome. *Clin Obstet Gynecol.* 50(1):295-304, 2007.

Legro RS. Expert Commentary Should all obese women be screened for Polycystic ovary syndrome? *Ob/Gyn Management.* 19(2): 23-4 2007.



Legro RS Response to Letter “My 24 year old niece has just been diagnosed with Polycystic ovary syndrome”. Saturday Evening Post. May 2007.

Legro RS Interview on the genetics of Polycystic ovary syndrome, Androgen Excess Society Newsletter, Winter 2007.

Legro RS, Baillergeon JP Should metformin be used as front line therapy for infertility in women with Polycystic ovary syndrome? Sexuality, Reproduction, and Menopause, 5(2): 17-19, 2008.

Legro RS Metformin for Infertility in polycystic ovary syndrome: Going, Going, Gone. Contemporary Ob/Gyn, 52 (12):54-61, 2007.

Legro RS New directions In Polycystic ovary syndrome Semin Reprod Med 26(1):3-4, 2008.

Coney P, Ladson G, Sweet S, Legro RS. Does polycystic ovary syndrome increase the disparity in metabolic syndrome and cardiovascular-related health for African-American women? Semin Reprod Med. 26(1):35-8, 2008.

Katcher HI, Legro RS, Kris-Etherton PI. The effects of a whole grain-enriched hypocaloric diet on cardiovascular disease risk factors in men and women with metabolic syndrome. IAS Website [www.athero.org](http://www.athero.org)

### **Book Chapters:**

Estes SJ Disorders of prolactin secretion. In: Somkuti SG, ed. Obstetrics and Gynecology Pearls of Wisdom, Third Edition. Boston (MA): Boston Medical Publishing Corporation; 2008.

Estes SJ. Amenorrhea. In: Somkuti SG, ed. Obstetrics and Gynecology Pearls of Wisdom, Third Edition. Boston (MA): Boston Medical Publishing Corporation; 2008.

Estes SJ, Ginsburg ES. Infertility treatment and assisted reproduction in HIV infected couples. In: UpToDate, Rose, BD (Ed), UpToDate, Wellesley, MA, 2008.

Dmitrovic R, Legro RS. Chapter 11: Polycystic ovary syndrome in “Treatment of the Obese Patient” Contemporary Endocrinology, Eds. Kushner RF, Bessesen DH Humana Press 2007.

Flaherty EE, Legro RS. Obesity: Recognition and Treatment in Women. In Reproductive Endocrinology and Infertility. Ed Vivian Lewis, M.D. Landes Bioscience Vademecum, 2007

Demissie M, Legro RS, Dunaif A. The insulin resistance of Polycystic ovary syndrome. Insulin resistance and Polycystic Ovarian Syndrome: Pathogenesis, Evaluation and Treatment Eds Diamanti-Kandararkis E, Humana Press, Totowa NJ 2007.

Legro RS, Winans E. Acquired Polycystic ovary syndrome: epilepsy, bipolar disorder, and the role of anti-epileptic drugs. In Polycystic ovary syndrome: Current Concepts and Controversies from the Ovary to the Pancreas. Eds. Andrea Dunaif, Jeff Chang, Steve Franks, Richard Legro. Humana Press, Totowa NJ 2007

Legro RS. Clinical Evaluation of Polycystic ovary syndrome in Endocrine Update: Polycystic ovary syndrome, Eds Ricardo Azziz, Springer Press, 2007.

### **Books:**

Eds. Dunaif A, Legro RS, Chang RJ, Franks S. Polycystic Ovary Syndrome: Current Concepts and Controversies, From the Ovary to the Pancreas. Humana Books 2007.

### **Monographs:**

Azziz R, Carmina A, Legro RS, Escobar-Morreale H, Futterweit W, Witchel SF, Jannssen OE. *Position Statement: The Androgen Excess Society evidence-based criteria for defining the polycystic ovary syndrome as a predominantly hyperandrogenic syndrome. Complete task force report. Available online.*

### **Abstracts:**

Macaya R, Legro RS, Gogtas H, Dunaif A. Increased risk of hyperandrogenemia in obese women without clinical evidence for androgen excess, Poster presentation at the Annual Meeting of the North American Society for the Study of Obesity, 2007.

Urbanek M, Legro RS, Dunaif A, Biyasheva A. Identification of novel TCF7L2 associated Polycystic ovary syndrome (PCOS) susceptibility locus which is independent of the type 2 diabetes locus identified in Caucasian populations Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Urbanek M, Biyasheva A, D'Souza J, Nampiaparampil BS, Sefton E, Ackerman C, Legro RS, Dunaif A. The role of genetic variation in the lamin a/c gene in the etiology of Polycystic ovary syndrome (PCOS). Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Coney P, Ladson GW, Sweet SD, Kunselman AR, Demers LM, Legro RS, Dodson WC. Correlates of serum 25-ohd levels in reproductive-age black and white women. Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Wickenheisser JK, Dodson WC. Human cumulus cells isolated during ART: steroid biosynthesis and gonadotropin responsiveness in culture. Presented at the Society for Gynecologic Investigation, San Diego, 2008

## Research

### Grant Support

#### Current: Principal Investigator

Source of Support: National Institutes of Health  
Identifying Number: 1R01HD056510  
Principal Investigator: Legro, RS  
Project Title: Treatment of Insulin Resistance vs. Hyperandrogenism in Infertile PCOS Women  
Percent Effort: 10%  
Total Direct Costs: 3,132,220  
Years of Award: 06/01/08-05/30/13

Source of Support: National Institutes of Health  
Identifying Number: 2 U54 HD034449-11A2 (Through VCU with Nestler JE overall PI)  
Principal Investigator: Legro, RS (Key Investigator for Project I in the U54 grant)  
Project Title: Hyperandrogenism and Insulin Resistance in the Ontogeny of PCOS  
Percent Effort: 10%  
Total Direct Costs: 850,000  
Years of Award: 05/01/08-04/30/13

Source of Support: Commonwealth of Pennsylvania  
Identifying Number: SAP 41-000-26343  
Principal Investigator: Legro RS  
Project Title: Translational Research in Polycystic ovary syndrome  
Percent Effort: 2%  
Total Direct Costs: 38,490  
Years of Award: 01/01/08-12/31/08

Source of Support: National Institutes of Health  
Identifying Number: 2 U10 HD 38992  
Principal Investigator: Legro, RS  
Project Title: Cooperative Multicenter Reproductive Medicine Network  
Percent Effort: 15%  
Total Direct Costs: 1,000,000  
Years of Award: 07/01/07-06/30/12

Source of Support: National Institutes of Health -Fogarty  
Identifying Number: 1 RO3 TW007438-01  
Principal Investigator: Legro RS  
Project Title: The treatment of dysmenorrhea: Effects of sildenafil  
Percent Effort: 1%  
Total Direct Costs: 103,000  
Years of Award: 8/01/06-7/31/09

Source of Support: National Institutes of Health  
Identifying Number: U54 HD044315  
Principal Investigator: Coney, PJ  
Project Title: The Meharry Medical College/Penn State Cooperative  
Reproductive Science Center  
Percent Effort: 5% (Co-Director of the Center)  
5% (P.I. Project III- A Randomized trial of metformin and  
lifestyle interventions in adolescents and adult women with  
PCOS)  
Total Direct Costs: 5,446,268 (Penn State Direct Costs 1,250,000)  
Years of Award: 06/01/03-6/30/08

Source of Support: CROWN, Lancaster PA  
Identifying Number: None  
Principal Investigator: Legro RS  
Project Title: Continuous Glucose Monitoring in Pregnant Women with  
Polycystic ovary syndrome: A case control study  
Percent Effort: 1%  
Total Direct Costs: 30,316  
Years of Award: 05/01/05-04/30/08

Source of Support: CROWN, Lancaster PA  
Identifying Number: None  
Principal Investigator: Legro RS  
Project Title: Development of a Screening Test for Endometrial  
Hyperplasia in a At Risk Population  
Percent Effort: 1%  
Total Direct Costs: 50,000  
Years of Award: 10/01/05-9/30/08

Source of Support: Commonwealth of Pennsylvania  
Identifying Number: SAP 41-000-26343  
Principal Investigator: Legro RS  
Project Title: Planning Grant for an Obesity and Reproduction Center  
Percent Effort: 5%  
Total Direct Costs: 402,000  
Years of Award: 01/01/05-12/31/08

**Current Funding: Co-Investigator**

Source of Support: National Institutes of Health  
Identifying Number: 2R01-HD33852  
Principal Investigator: McAllister JM  
Project Title: 17 $\alpha$ -Hydroxylase expression in human ovarian cells.  
Percent Effort: 3%  
Total Direct Costs: 1,496,218  
Years of Award: 12/31/05-11/30/09

Source of Support:	National Institutes of Health
Identifying Number:	RO1-HD53000
Principal Investigator:	McAllister JM
Project Title:	Mechanism of Metformin Action
Percent Effort:	3%
Total Direct Costs	1,005,000
Years of Award:	6/01/08-5/31/13

## **DIVISION OF WOMEN'S HEALTH**

### **Women's Health Staff**

David R. Halbert, M.D., Professor Emeritus  
Matthew F. Davies, M.D., Associate Professor, Division Chief, Residency Program  
Director  
Carie D'Agata, M.D., Assistant Professor  
Virginia Hall, M.D., Associate Professor  
Gerald Harkins, M.D., Assistant Professor and Chief – Section of Minimally Invasive  
Surgery  
Rae Kennedy, M.D., Assistant Professor  
Colin MacNeill, M.D., Associate Professor  
Richard Pees, M.D., Associate Professor  
Holly Thomas, M.D., Assistant Professor, Medical Director for Outpatient Services,  
Assistant Residency Program Director  
Robert Yarwood, M.D. Associate Professor, Student Clerkship Director  
Barbara Smith, CNM  
Wendy Jones, CRNP  
Kim Shuster- Dubois, CRNP  
Amy Stauffer, CRNP  
Kim Ambacher, LPN, peri-operative services  
Denise Neely, Secretary

### **Overview**

The Division of Women's Health provides not only primary care but also specialty care in areas of general obstetrics and gynecology. This includes a wide variety of complex issues involving obstetric and gynecologic disorders for the women of Central Pennsylvania. Specific subdivisions within our division in which faculty have special interests include vulvodynia and chronically recurring vaginal infections, pediatric and adolescent gynecology, pelvic pain, advanced laparoscopic dissection, minimally invasive surgery and complex pelvic floor reconstructions including the evaluation and correction of incontinence. The clinical offices are located at three main sites, with the principal one being the Women's Health Center on Hope Drive in Hershey, Pennsylvania. The secondary site is our Nyes Road office in Linglestown, Pennsylvania. The most recently added site is located on Erford Road in Camp Hill, PA, which began seeing Ob/Gyn patients in July 2004. The members of the Division of Women's Health saw an aggregate of 31,978 visits in our offices last year. This represents a 10.2 % increase from the 29, 016 visits during 2005-2006.

In addition, 1,334 total inpatient and outpatient operative cases were done during this academic year. This represents a 5.8 % increase from the 1,261 cases the prior year.

As is clearly evident, the division continues its overall growth. In keeping with this, we have the anticipated hiring of two new faculty members in the first half of this upcoming academic year. The Division of Women's Health continues to also play the lead role within the department in the education of both the medical students and residents. We

initiate the student education with the introduction of pelvic exam during the first year of medical school. Dr. Gerald Harkins along with Dr. J.C. Trussell from Urology, were again the co-coordinators for the Interdisciplinary Course Curriculum (ICC) for the reproductive block in the second year of medical school. This course provides eighteen lectures as well as five cases used in Problem Based Learning (PBL). Coordinating this with the department of education within the medical school has led to another very successful year for this portion of the medical student curriculum

For the third year of medical school, Dr. Robert Yarwood continues to serve as the Clinical Clerkship Director, and continues to run a very efficient and model program. He involves all faculty members through not only the clinical services, but also in the lectures given throughout the student's third year rotation. This year with the help of Dr. MacNeill, he has consolidated the pelvic exam OSCE into a more intensive one-week block to enhance the student's practical knowledge and skill. Finally Dr. Robert Yarwood, with the help of Dr. Carie D'Agata, runs the fourth year electives. Again this year we have had a high number of students opting to rotate through the pediatric and adolescent gynecology rotation with Dr. D'Agata, and the gynecologic oncology rotation under the supervision of Dr. Olt. In addition, there was more use of rotations on reproductive endocrinology and maternal fetal medicine as well.

The Women's Health Division, as the largest division within the department, has three residents rotating on its service: one in the first year, one in the third year and one chief resident. In addition, because of our large role on labor and delivery, we also have a first year and a fourth year resident running the inpatient obstetrical service during the day and at night time. Dr. Matthew Davies has returned this year to his former role as Residency Program Director, a title he formerly held for six years. This year saw a very successful resident matching program through the NRMP and now Dr. Holly Thomas has stepped into the role of Assistant Program Director.

The Division of Women's Health's research endeavors are primarily focused on the work of Dr. Colin MacNeill, who focuses on vulvovaginitis and recurrent vaginal infections. He has completed his grant on the study of these diseases through the NIH funding. His collaborative work goes from within the department with Dr. Judith Weisz, to outside the department with Dr. David Phelps in Microbiology and Dr. Carol Weisman in Public Health Sciences. He currently has a grant for tobacco settlement money for continued research in this area

Other research includes clinical projects and written reviews for peer reviewed journals. In addition to this, Dr. Harkins continues to develop clinical and educational research projects focusing on Minimally Invasive Surgical techniques as well as teaching models for residents.

## **Faculty**

### **Matthew F. Davies, MD, Associate Professor, Division Chief, Residency Program Director**

Medical School: Penn State University College of Medicine, Hershey, PA, MD 1989  
Residency: Penn State University College of Medicine, Obstetrics and Gynecology 1989-1993

### **Carie D'Agata, MD, Assistant Professor**

Medical School: Temple University, Philadelphia, PA, MD 1998  
Residency: Penn State University College of Medicine, Hershey, PA, Obstetrics and Gynecology 1998-2002

### **Virginia E. Hall, MD, Associate Professor**

Medical School: Hahnemann University, Philadelphia, PA, MD 1972  
Residency: Albert Einstein Medical School, Obstetrics and Gynecology 1980-1982

### **Gerald Harkins, M.D., Assistant Professor, Chief – Section of Minimally Invasive Surgery (MIS)**

Medical School: Penn State University College of Medicine, Hershey, PA, MD 1996  
Residency: Madigan Army Medical Center, Tacoma, WA, Obstetrics and Gynecology 1996-2000

### **Rae L. Kennedy, M.D., Assistant Professor**

Medical School: University of Virginia, MD 1998  
Residency: Hahnemann University/Drexel, Philadelphia, PA, Internal Medicine 1998-1999  
Hahnemann University/Drexel, Obstetrics and Gynecology 1999-2002  
Penn State University College of Medicine, Hershey, PA, Obstetrics and Gynecology 2003-2005

### **Colin MacNeill, MD, Associate Professor**

Medical School: Penn State University College of Medicine, Hershey, PA, MD 1988  
Residency: Penn State University College of Medicine, Obstetrics and Gynecology 1988-1992

### **Richard C. Pees, MD, Associate Professor, Head of Department Quality Assurance/Quality Improvement**

Medical School: Hahnemann Medical College, Philadelphia, PA, MD 1977  
Residency: Keesler Medical Center, Keesler Air Force Base, MI, Obstetrics and Gynecology 1977-1978

### **Dr. Holly Thomas, M.D., Assistant Professor, Medical Director of Outpatient Services, Associate Residency Program Director**

Medical School: Penn State University College of Medicine, Hershey, PA, MD 1993-1997  
Residency: Medical College of Pennsylvania, Obstetrics and Gynecology 1989-1993



**Robert Yarwood, MD, Associate Professor, Medical Student Clerkship Director**  
Medical School: The University of Texas, Southwestern Medical School, Dallas, TX, MD  
1979 Residency: U.S. Naval Hospital, Port Smith, VA, Obstetrics and Gynecology 1982 –  
1986

**Clinical Activities for 2006-2007:**

**1,334** total operations performed (121 at HOSC; 1,213 at PSMHMC)  
**3,126** new patient visits (prior year 3,418)  
**28,852** return patient visits (prior year 25,598)

**Research/Grants**

1. Harkins, G  
Source: Gynecare, Friends of Women's Health 1/1/06 – present
2. MacNeill, C. Vulvodynia Association. Innate Immunity In Vulvodynia. \$7,500.  
11/15/2006

**Publications**

**Pees, R.C.**, et. al. (2007). Professionalism in Medical Education: The Development and Validation of a Survey Instrument to Assess Attitudes Toward Professionalism. *Medical Teacher*, 29(2), e58-e62.

Kamdar N, Fisher L, **MacNeill C.** Improvement in Vestibulitis Symptoms on Treatment with Leukotriene Inhibitor Montelukast. *Journal of Reproductive Medicine*. 52(10):912-6, 2007 Oct.

**Harkins GJ**, "Pelvic Mass; Review Questions" Self Assessment in Obstetrics and Gynecology. *Hospital Physician* 43(1) 27-29, 2007

**MacNeill, C., Davies, M. F. and Repke, J.T.** Postpartum Dyspareunia Evaluation and Management. *Female Sexual Pain Disorders: Evaluation and Management*. Andrew Goldstein, Caroline Pukall, and Irwin Goldstein editors. Blackwell Publishing Ltd, Oxford, UK. In press

**MacNeill, C. and Davies, M. F.** Herpes Genitalis Update. *Hospital Physician*. Infectious Disease Board Review Manual. In preparation.

## LABOR AND DELIVERY

The labor and delivery unit at the Penn State Milton S. Hershey Medical Center had 1,703 total deliveries July 1, 2007 through June 30, 2008. Over the same time interval for the preceding year 1,624 deliveries were performed. This represents a 7.2% increase from the prior year. Overall, there were 581 cesarean deliveries, 39 vacuum deliveries, 18 forceps deliveries. Our cesarean section rate overall was 37.6% and a primary cesarean section rate of 23.1%, rate of repeat cesarean section was 14.5%. Finally, we had 26 successful VBAC's and 10 failed VBAC's attempts (72% success rate)

Forceps assisted delivery rate was 1.7%  
Episiotomy rate was 3.2%

The unit maintained a very high rate of high-risk obstetrical patients through the year. The disorders included gestational or pre-gestational diabetes mellitus, placenta previa, third trimester bleeding, maternal cardiac conditions, gestational hypertension, preeclampsia, chronic hypertension during pregnancy, and pre-term labor.

On an administrative basis, the OB Providers Group, with input from every delivering obstetrician and family practitioner with obstetrical privileges at the Penn State Milton S. Hershey Medical Center, has formalized guidelines for a variety of inpatient and outpatient obstetrical management issues, and these are currently undergoing reviews and updates. New ones will be added. The meetings of this group occur on a monthly basis and address on an ongoing basis, clinical protocols and their continued improvement.

Obstetrical Neonatal Collaborative group meets monthly to review issues and enhance quality of care. We have begun electronic scheduling of inductions and procedures to improve efficiency, to streamline this process, and to minimize scheduling related problems.

**PENN STATE MILTON S. HERSHEY MEDICAL CENTER  
LABOR & DELIVERY STATISTICS  
July 1, 2007 – June 30, 2007**

Statistical Category	Annual Percentage
Annual rate of primary cesarean sections	23.1%
Annual rate of repeat cesarean sections	14.5%
Annual rate of total cesarean sections	37.6%
VBAC success rate	72.0%
Annual % of total deliveries in birthing rooms (labor/delivery/recovery)	61.3%
Annual % of vaginal deliveries in birthing rooms (labor/delivery/recovery)	93.4%
Annual % of deliveries by certified nurse midwives	0.0%
Annual percentage of women who received intravenous heplock	100.0%
Annual % of women who experienced inductions	26.6%
Annual % of women who experienced augmentation	17.8%
Annual % of episiotomies	3.2%
Annual % of forceps deliveries	1.7%
Annual % of women who received epidural anesthesia	54.5%
Annual % of women who received spinal anesthesia	24.6%
Annual % of women who received general anesthesia	4.3%
Annual % of women who were breast-feeding their (NBN)	77.0%
infants upon discharge from the hospital (NICU)	78.0%

# **AMBULATORY SERVICES**

## **Locations**

The outpatient services function from five office sites. On site radiology services are available at the 3<sup>rd</sup> floor North offices. Phlebotomy and laboratory facilities are present at all sites. Services are provided 5 days a week at all but the Lancaster site. The 3<sup>rd</sup> floor North office is open on most weekends for REI care.

The main site for the divisions of the Department of OB/GYN is the University Physician Group at 35 Hope Drive, Hershey, PA. The Divisions of Women's Health, Gynecologic Oncology, and Reproductive Endocrinology and Infertility provide patient care at this site.

The Divisions of Maternal Fetal Medicine and Reproductive Endocrinology and Infertility are the main providers at the University Hospital site 3 north. The Division of Women's Health has one room at this site and it is primarily used by the surgical nurse.

The University Physician Group at Nyes Road, Harrisburg, PA is the third site and is covered by the Divisions of Women's Health.

The University Physician Group at Erford Road, Camp Hill, PA is another outpatient site. The Divisions of Women's Health and Gynecologic Oncology provide women's services here.

The University Physician Group at Women and Babies Hospital, Lancaster, PA is the final outpatient site. The Division of Gynecologic Oncology provides services here.

## **Staff**

Currently the Department has 19 faculty physicians, 19 staff physicians, 3 nurse practitioners, and 2 nurse midwives providing patient care. The Hope Drive and 3 North sites are supported by an office staff of over 40 valuable members. The other three UPG sites are multispecialty and have separate office staff.

## **Services**

Patients are drawn from throughout the Commonwealth of Pennsylvania. Services provided in our outpatient setting include prenatal care, high risk obstetric consultation and care, non-stress tests, fetal ultrasounds, general gynecologic and well woman care, gynecologic ultrasound, acute and chronic gynecologic oncology care, colposcopy, LEEP, counseling services, pediatric gynecology, uro-gynecology, and a full range of infertility evaluations and management including in-vitro fertilization. The outpatient services continue to expand and appointment volumes have increased yearly. All services continue to serve new and return patients.

## Visits FY 2008-

Site	Total
35 Hope Dr.	31,930
3N MFM	7,503
3N REI	5,707
3N WH	283
Nyes Road	7,673
Erford Road	3,789
Lancaster	428
Total	57,313

Total visits in FY 2004 were 42,610; FY 2005 were 44,878; FY 2006 were 49,632, and FY 2007 were 52,480.

## Changes

The 3 North site employs two US sonographers staffing both ultrasound rooms for the Maternal Fetal Medicine service. This has allowed the addition of First Trimester Screening services. A full time genetic counselor has joined the Department.

A dedicated triage phone for the Hope Drive site is staffed by a LPN to cover patient care calls. This area handles the acute patient phone needs for the Hope Drive and Erford Road sites. As staffing becomes available, the Nyes site will be added.

Medical student led gynecology sessions are held two ½ day sessions per week with the teaching faculty from Women's Health.

The Nurse Practitioner and Nurse Midwife schedules have been kept out a year in advance for enhancing the scheduling process.

A second MOA II is now in place at the Hope Drive office.

## Future

The future will bring an increase in volume at all practice sites.

Communication by EMR is still continuing to increase.

An office hysteroscopy unit and set up are being developed.

The purchase of an office CMG unit is planned. Space for these services will be developed and shaped with the acquisition of the Breast Care space.

Women's Health will take over the colposcopy and CDC follow-up of abnormal pap smear screening.

A ½ day clinic session of gynecology only patients has been developed. With this session, a patient may schedule a year in advance.

A second outpatient resident will help with acute patient care needs and consults.

# MATERNAL FETAL MEDICINE RESEARCH LABORATORY

## Maternal Fetal Medicine Research Staff

Judith Weisz, M.B., B. Chir., Professor  
Colin MacNeill, M.D., Associate Professor  
Debra Shearer, Senior Research Technician

**Breast carcinogenesis:** Our previous studies of normal and neoplastic human breast tissue, outlined in previous annual reports, have brought to light two novel phenomena: The first of these is relevant to the critical issue of mechanisms responsible for the high breast cancer incidence associated with our Western industrialized lifestyle/environment. Specifically, we found evidence of lipid peroxidation, a marker and propagator of oxidative stress and known contributor to carcinogenesis, in mammary epithelium of the majority of specimens obtained from women representative of our population: None of the tissue donors had breast cancer or any special risk factors for developing breast cancer over and above that posed by our Western industrialized environment/lifestyle. Importantly, we found evidence of lipid peroxidation in mammary epithelium already in over half of the tissue specimens obtained from teenagers. This finding is analogous to the finding at autopsy atherosclerotic plaques in young soldiers killed in the Korean War, a pathology that is also linked to lipid peroxidation and chronic oxidative stress. It was this finding that led to the realization of the need for early intervention if the ultimate potentially lethal consequence of atherosclerotic cardiovascular disease was to be prevented. Our findings were presented at the Department of Defense's Era of Hope Breast Cancer meeting in Baltimore in June 2008. The second phenomenon identified by us is the enrichment of pre-invasive in situ breast cancers and lymph node metastases with presumptive breast cancer initiating stem cells. This finding promises to overcome a major obstacle to characterizing breast cancer initiating stem cells, namely, their paucity in invasive cancers and distant metastases where investigators have sought to identify such cells thus far. Identifying and characterizing cancer stem is critical since cells recurrence of the disease despite apparent cure is likely to be due to the resistance of these cells to current therapies that target stem cells progeny that make up the bulk of the cancers.

During the last year we have focused on incorporating new techniques in our studies and on establishing new collaborations in order to enable us to characterize these two phenomena at the molecular level. Fortunately, recent recognition of the need for more informative molecular biological studies of human pathological specimens has led to the introduction of new methods that make such studies possible. We are in the process of setting up and validating such recently developed methods that can overcome the problem of heterogeneity that characterizes human tissue samples. These methods will enable us to complement the descriptive cytochemical studies with measurements of transcripts in cells isolated from tissue sections using laser capture microdissection. Importantly, through collaboration with researchers in General Electric's Global Research Center, we are now in the position to take advantage of a novel multiplex immunocytochemical method they have developed. GE's proprietary method makes it possible to identify and localize with high resolution 20 or more biomarkers in a single 5  $\mu\text{m}$  section from formalin fixed paraffin embedded tissues. This method is far superior to the one outlined in last year's annual report that we were in the process of setting up:

GE's method was developed in recognition of the need to provide pathologists and researchers with a tool for reaching the goal of molecular diagnostics. The collaboration with GE will enable us to immunophenotype presumptive BC initiating stem cells in both in situ lesions and in lymph gland metastases and to assess the effect of chronic oxidative stress on critical regulatory molecules. A grant application with GE researchers as co-investigator has already been submitted and two additional ones are being prepared.



# REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY RESEARCH

## Reproductive Endocrinology and Infertility Research Staff

Richard S. Legro, M.D.  
Barb Scheetz, Research Coordinator  
Jamie Ober, Special Projects Coordinator  
Patsy Rawa, Special Projects Coordinator  
Sandy Eyer, Associate Projects Coordinator  
Emily George, Lab Intern  
Corey Booker, M.D. Resident  
Romana Dmitrovic, Outside Co-investigator

With budget cutbacks and increasing competition for limited research funds, these are truly times that challenge the researcher's soul. Our research team has responded by diversifying our research portfolio and pursuing new, but related areas, to our previous studies. To do this we have reached out to new collaborators and new ideas. Although the core of our research mission remains focused on Polycystic Ovary Syndrome, we are now pursuing studies in dysmenorrhea, oral contraceptive pills for gynecologic indications, the effects of obesity on reproductive function in both males and females, erectile dysfunction, and the effects of pollution of human reproduction. We will address each of these interests in separate sections below, but our unit received two RO1 level grants in the last year to sustain our mission.

In addition to the research staff listed above, Dr. Dodson, Dr. Gnatuk, and Dr. Estes are co-investigators in the research and participate regularly in the care of research subjects, and the conduct of the studies without their efforts and participation this unit could not succeed. Finally it is important to acknowledge the critical contributions of Allen Kunselman and his colleague Christy Stetter, biostatisticians in the Department of Public Health Sciences in the College of Medicine to the design, data management, and statistical analyses of these studies.

### **Polycystic Ovary Syndrome**

Polycystic Ovary Syndrome is one of the most common endocrinopathies that affect women and consists of unexplained androgen excess and chronic anovulation. Affected women present to a physician desiring treatment for menstrual disorders and infertility, obesity, acne, and hirsutism. Recently more severe metabolic consequences including diabetes and increased cardiovascular risk have been associated with the syndrome. Therefore, diagnosis and treatment tend to rely greatly on the art of medicine, with an absence of the science of medicine. We have studies dedicated to the genetics, pathophysiology, and treatment of PCOS.

### *Genetics of PCOS*

This year we successfully renewed our longstanding NIH U54 grant devoted to PCOS. This grant is centered in Virginia Commonwealth University in Richmond with John Nestler, M.D. as PI. Dr. Legro is a Key Investigator and Co-chair of the steering committee. We were able to continue this work during our period of no

funding, through a Bridge Grant received through Tobacco Settlement Funds from the University. This award is an example of how a small investment can go a long ways towards maintaining important research. We will continue to search for PCOS genes in our extensive and well phenotyped set of families from our region. We published as part of this larger consortium several important papers linking phenotype to a specific genetic marker on Chromosome 19 that we have found is strongly associated with PCOS. We continue our work with Dr. Andrea Dunaif at Northwestern University in this area and we are part of a large consortium seeking NIH funding for a Genome Wide Association Study.

Additionally within this U54 project, we are initiating a new project that will study the children of women of PCOS for metabolic and reproductive abnormalities as they undergo reproductive maturation. We published our pilot data from a smaller study this year in the Journal of Clinical Endocrinology and Metabolism (JCEM), in which we noted hyperinsulinemia in the children that was exacerbated by pubertal maturation. This article was well received and the journal dedicated an editorial to this study highlighting both the difficulties as well as the importance of such studies. Our new study which is in start up will be conducted concurrently at Penn State and VCU and is entitled "The (PCOS) Children Study". Barbara Scheetz coordinates all studies within this project and has successfully done this now for over a decade.

Finally, Dr. Legro, in his role as PI of the Pregnancy in Polycystic Ovary Syndrome Study (PPCOS) also published an article in JCEM reporting on the association between single nucleotide polymorphisms (SNPs) in candidate genes for drug response and ovulation. Specifically they noted a highly negative association between a SNP in a liver kinase gene (LKB1) and metformin. These genetic polymorphisms may eventually be used to identify patients likely to respond to treatment. These aims have been incorporated into most of the studies discussed below.

#### *Treatment Studies*

Dr. Legro will be conducting two major studies of infertility in PCOS. The first is being conducted by the Reproductive Medicine Network and is entitled PPCOS II (Pregnancy in Polycystic Ovary Syndrome II). It will be a randomized double blind study of letrozole vs. clomiphene in women with PCOS. It is scheduled to start up in 2009 and will involve the seven sites of the Reproductive Medicine Network (RMN), a NIH sponsored multi-center clinical trial network. We have incorporated many sub studies including the role of obesity, predictive markers, and genotype on response. Dr. Legro is the lead investigator and was the primary author of the protocol, which was prioritized at the first protocol to be initiated in this cycle of the RMN. We continue to publish sub studies from the PPCOS I trial with multiple papers appearing in this academic year. In fact to date, there have been 12 papers from this trial that have appeared in the peer review literature. Jamie Ober continues to head the RMN projects and be a leader among nurse coordinators in the network.

The second study is entitled OWL-PCOS (or OCP vs. Weight Loss for Infertility in PCOS). This trial is funded by a large RO1 with Dr. Legro as PI, and is a two site clinical trial at Penn State and University of Pennsylvania. This study is truly a multi-investigator, multi-disciplinary, multi-site trial. We have assembled an outstanding team of clinical investigators including Dr. Dodson at Penn State, and Christos Coutifaris, M.D., Ph.D and Anuja Dokras M.D., Ph.D at U Penn, a world class

nutritionist in Penny Kris Etherton, Ph.D. at Main Campus and Kinesiologist Nancy Williams, Sc.D and Psychologist and Obesity Expert David Sarwer, Ph.D. at U Penn. We will explore the effects of a pre-conception intervention of OCP or weight loss, along and in combination at improving ovulatory response and pregnancy in obese women with PCOS. This study was just initiated with two subjects already randomized. Patsy Rawa is the lead coordinator of this study which has involved new challenges of multi-site collaboration and coordination.

This year we have completed our studies in our other U54 Cooperative Reproductive Center with our partner, Meharry Medical College in Nashville TN. This grant focuses on minority differences in basic reproductive endocrinology and in response to treatment. The third project is a double blind randomized trial of the effects of a lifestyle intervention with or without metformin on ovulation and hyperandrogenism in women and adolescents with PCOS. This study is now in the phase of data cleansing and we plan to present the results at this year's Endocrine Society meeting in Washington D.C. Additionally we are comparing the phenotype of PCOS in African Americans to that of Caucasians, due to the unique case/control design of the overall center. Other projects in the center focus on bone density and leiomyomas. All projects in this center are coordinated by Patsy Rawa with administrative support from Sandy Eyer.

We are also conducting two small studies of novel treatments of PCOS. One involves atorvasatin, and examines the effects on steroidogenesis and vascular reactivity. This project is being led by Dr. Nazia Raja-Khan, a BIRCWH (Interdisciplinary Women's Health Research) scholar in Medical Endocrinology. Dr Raja-Khan was also recently awarded a Dean's Feasibility Grant to explore the effects of Vitamin D supplementation on insulin resistance in PCOS.

#### *Pathophysiology*

We continue to pilot several small studies with an interest in pregnancy and the long term complication of endometrial cancer. In one we have followed glucose tolerance during pregnancy in a group of women with PCOS and weight matched controls and the study is now closed to enrollment as we follow the pregnancies to delivery. We have also examined the utility of 24h Glucose monitoring in these populations in the same study. This study was funded by the Center for Research in Women's Health (CROWN). We have also nearly completed our protocol to study the predictive effects of continuous blood pressure monitoring in pregnant women at high risk for hypertensive disorders led by Dr. Corey Booker a resident in our department. Dr. Booker presented preliminary data from this project at multiple meetings last year and matched as a fellow in Maternal Fetal Medicine at the University of North Carolina, a highly prestigious and competitive position.

In another study funded by CROWN, we are examining the predictive value of ultrasound for endometrial pathology in women with metabolic syndrome and/or diabetes at risk for endometrial cancer. We continue to enroll for that study. These studies have been ably coordinated by Barbara Scheetz and Sandy Eyer. A lab intern Emily George assists Barbara Scheetz locally.

#### **Obesity and Reproduction**

Obesity remains an interest of our group, above and beyond its role in the ontogeny of PCOS. We are now completing the third and final year of a grant from Tobacco

Settlement Funds, our obesity center focused on reproduction. Dr Legro is the PI and there are a number of cross departmental collaborators. We have three projects related to this center. Project 1 is entitled "The Effect of Morbid Obesity and Rapid Weight Loss from Bariatric Surgery on Reproductive Function" and we will study male and female reproductive function in morbidly obese men and women prior to and after bypass surgery and is led by Dr. Robert Cooney in the Dept of Surgery. We propose that surgery and ensuing weight loss will have marked improvements on reproductive function. We have enrolled 50 subjects (primarily female, but also some males) and studied them intensively from pre-operative till 12 months post-operatively. The project is coordinated by Sandy Eyer. We are currently running urinary and blood assays from this project and plan on presenting preliminary results in the next year.

The second project examined the relationship between reproductive functions and sleep disorders. Under the leadership of Dr. Alex Vgontzas in the Dept of Psychiatry, we studied the effects of obesity on sleep apnea in men and completed a randomized trial of rosiglitazone, an insulin sensitizer these same subjects. We have analyzed the results and plan to present them at the Endocrine Society in 2009. We are now starting up an exercise study in subjects with sleep apnea.

The third project focuses on The Effect of Obesity on Aromatase Activity in Human Ovarian, Tissue and the P.I. is Jan McAllister, Ph.D. and Jessica Wickenheisser, Ph.D. in Cellular and Molecular Physiology and Dr. Dodson as the Co-I. We have obtained ovarian granulosa cells from 50 women undergoing IVF at the time of oocyte retrieval. These studies are ongoing and still collecting tissue specimens. They are examining the effects of obesity of estrogen production and aromatase activity, the key enzyme that converts androgens into estrogens. A RO1 grant in this area has been submitted by Dr. Wickenheisser and we plan on presenting and publishing the results this year.

We developed a greater interest in nutrition and its effects on metabolic and reproductive function due to the former presence of a Ph.D. student in nutrition Heather Katcher, who split her time between Hershey Medical Center and State College. This work was critical to funding the OWL-PCOS project above. We published last year our results of a trial that examined the effects of diet on the metabolic syndrome in men and women in the American Journal of Clinical Nutrition. Specifically, we demonstrated that a low glycemic diet will have benefits above and beyond weight loss, with a greater improvement in circulating CRP, a cardiovascular risk marker. This study received national and international recognition and interest. We also published a study on the effects of meal composition on reproductive and endocrine parameters in PCOS.

### **Oral Contraceptive Pills for Non-gynecologic Indications**

We published our results of the effects of continuous contraception vs. cyclic contraception in the JCEM in 2008. This was a randomized double blind trial of continuous versus traditional 21-day treatment of oral contraception in normal women with regular menses, as a prelude to further studies in women with gynecologic abnormalities. This trial documented with urinary and serum levels of sex steroids the rebound effect on ovarian function during the pill free interval. It also provided the clear theoretical underpinnings in improved suppression of the ovary and endometrium of continuous contraception. We have attempted funding of a

randomized trial for hirsutism and are currently reworking the study and aiming for extramural funding.

### **Dysmenorrhea**

Dysmenorrhea is common and debilitating. New treatments are needed to improve quality of life during the menstrual related symptom period. Our visiting Fulbright scholar now back in Croatia, Dr. Romana Dmitrovic, who has initiated a randomized, double blind trial of a phosphodiesterase inhibitor (Viagra) and oral contraceptives for the treatment of dysmenorrhea in women and involves study of both acute and long term effects of this treatment in women. We have applied for and received NIH RO3 funding through the Fogarty Center to continue this work jointly in Croatia, and are now continuing these 3 year studies.

### **Male Infertility and Reproductive Function**

We have taken on a greater interest in male infertility through our participation in the RMN which now includes urologists and andrologists as co-investigators, and has developed several protocols which will be starting up in the near future. Dr. J.C. Trussell in the Department of Urology at Penn State will be the site investigator of these protocols. These will involve the treatment of azoospermia with clomiphene and a surgical trial of the role of varicocele for the treatment of male subfertility. Both of these are important questions that have not been adequately studied in the past. Outside the RMN, Dr. Legro and Dr. Trussell have a longstanding collaboration and interest in better understanding and treating erectile dysfunction. Dr. Trussell has recently published the results of a case control study linking factors related to insulin resistance to erectile dysfunction and is pursuing funding for a pilot randomized trial of metformin for resistant erectile dysfunction. We remain as a unit also very interested in the effects of obesity on male reproductive function. In conjunction with Dr. Peter Lee, a pediatric endocrinologist we published last year in *Fertility and Sterility* a study showing decreased paternity and altered inhibin levels in obese men, further solidifying the case against obesity as both a male and female infertility factor.

### **Effects of Air Pollution on Human Reproduction**

We have initiated a collaborative study to examine the effects of air pollution on the outcomes of in vitro fertilization with several large IVF programs, including Shady Grove Fertility Center in the D.C. area led by Dr. Gil Mottla, and Columbia University in New York headed by Dr. Mark Saue. This is a highly innovative and multi-disciplinary project between clinicians and basic scientists. Dr. Duanping Liao, an environmental epidemiologist in the Dept of Public Health Sciences is utilizing data from the EPA monitors of air quality in the vicinity of the IVF labs and patient home zip codes and correlating results with the cycle (i.e. pregnancy or no pregnancy). We have found a significant relationship between certain parameters and outcomes that we are continuing to analyze. These results led to the awarding of a Dean's Feasibility Grant to Dr. Legro and Liao between the IVF programs here, at Columbia University. We look forward to presenting and publishing these tantalizing results and proceeding with an extramural grant application in the next year.

# LOIS HIGH BERSTLER COMMUNITY HEALTH LIBRARY

## Library Staff:

Patrice Hall, M.L.S.

## OVERVIEW

This year the library the library celebrated its 10<sup>th</sup> anniversary. Since opening in April 1998 over 16,000 people have visited the library. The library's mission is to provide health information and education to its patrons to assist them in making informed decisions about their health and lifestyle. The library is open to the public and does not charge for its services. The library's consumer-level collection provides accurate and current information on a wide range of health topics with an emphasis on women's health issues. Information is available from print, non-print and electronic resources. The library is staffed full-time by a librarian with assistance from volunteers.

In 2002 the library became part of the Community Libraries Information Consortium (CLIC), a cooperative, resource sharing partnership consisting of this library, the Hershey Public Library and the Middletown Public Library. Through a LSTA grant the three libraries established a shared automation system. This partnership with two local, independent public libraries has increased the visibility of the library in the local community and made its resources more accessible.

## Activities

### *Ask the Librarian*

The electronic reference service was added in January 2001 as part of the redesign of the institution's website. It allows website visitors to email health-related questions directly to the librarian. When the service started the average number of requests averaged 30 per month. This year the average number of requests per month was 122. The library receives a variety of types of questions. Many requests are for information about our institution and its services. Others are requests for information on a particular disease or condition. Many positive comments have been received from the users of this service. Users appreciate the timeliness of the response and the quality of the information sent to them.

Currently the institution's website is undergoing another redesign. As part of this process a new health information website is being added to replace the old A to Z Health Topics site. The new website is a commercially produced product from A.D.A.M., Inc. This product covers more topics and is more interactive than the old static encyclopedia. The librarian has been working with Strategic Services to incorporate the "Ask the Librarian" service into the new website. Most hospitals have some type of health encyclopedia on their websites but our website remains one of the few that has a way to contact a librarian directly for a more in depth information and a personal response.

### *Collection Development*

Last year the library received a LSTA grant in the amount of \$4500 for collection development. The purpose of this project was to establish a DVD collection of health-related topics in order to provide needed information to library patrons in a media format that was increasingly being requested. The last of these funds were received in April 2008. A total of 65 titles were purchased with LSTA funds. An additional 11 titles were purchased with funds from the Penn State Hershey Association of Faculty and Friends. The response to this new collection has been very positive. To date the total circulations for the DVD collection is 230 circulations.

### *Outreach and Educational Programs*

The library continues to be involved in many outreach and educational activities.

This year the librarian and Val Gross, Instructional Librarian at the George T. Harrell Library, presented a series of workshops to public librarians in the Dauphin County and Cumberland County Library Systems. The aim of these workshops was to improve the public librarians' skills in providing health information to their patrons. The workshops covered searching PubMed and NLM consumer health databases.

The librarian participates in health fairs as a way to promote the services of the library and those of the Department of Obstetrics and Gynecology.

#### Health Fairs attended--

- Rutherford House Health Fair
- Children's Miracle Network Health Fair
- General Clinical Research Center Health Fairs
- Doc Talk
- Heinz-Menaker Health Fair
- Elizabethtown College Health Fair

The library also provides assistance to the many support groups and educational programs sponsored by other hospital departments. The Childbirth and Parenting Preparation program, Young Mothers' Program, Look Good Feel Good Program and Breast Care Center have all benefited from the bibliographic and reference services of the library this year.

### *Annual Survey*

In October the annual out-put measures survey was performed. This tool is designed to track patron satisfaction with library services and to provide feedback that can be used to improve service, direct collection development and help with the allocation of resources. Surveys are distributed to staff and community patrons. The surveys consist of closed and open-ended questions as well as a section that allows the patron to rate certain aspects of the library and its services.

Overall, the results of the community patron survey remain consistent with previous surveys. Physician referral continues to be the way most community patrons learn about the library. Reference is the most used service by community patrons and books the most used resource followed by computer resources. Patrons reported looking for information on specific diseases and on wellness equally. Community patrons most often use library resources to understand information given to them by a physician.

The staff survey results showed that the staff uses the library most often as a quiet work area with reference listed as the second most used service. The most used resources by the staff are the computer databases followed by the book collection. The survey also showed the staff looked for information for themselves and for their patients almost equally.

The results of the rating scale and the general comments showed that patron satisfaction with the library and its services remains high for both community and staff patrons. In the rating section of the survey the community patrons gave the helpfulness of staff the highest overall rating, followed by the physical environment. Staff patrons reversed the order, giving the physical environment the highest rating followed by the helpfulness of the staff.

### *Professional Development*

The librarian completed a number of continuing education courses:  
Web 2.0 Principles and Best Practices  
Scholarly Publishing and Open Access  
Patient Education: How Important Is It?

### **Grants and Donations**

This year the Association of Faculty and Friend's donated \$1000 to the library.

### **Library Annual Use Statistics**

#### Patron count

Community	1613
Staff	842
Total	2455

#### Circulation

Books	368
AV	137
Total	505

#### Reference

##### Directional

Community	64
Staff	19
Total	83

##### Ready

Community	355
Staff	164
Total	519

##### Instructional

Community	33
Staff	30
Total	63



Literature searches		
Community		1429
Staff		28
Total		1457
Total reference transactions		
Community		1881
Staff		241
Total		2122

## Conclusion

A recent national study by the Center for Studying Health System Change found that in 2007 56% of American adults sought information about a personal health concern, an increase from 38% in 2001. Of these respondents, over half said the information had a positive impact on their health and four out of five reported that the information helped them better understand a health condition.<sup>1</sup> The resources and services Lois High Berstler Community Health Library ensure that our institution is positioned to meet this growing demand for consumer health information.

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<sup>1</sup> “Striking Jump in Consumers Seeking Health Care Information” Tracking Report No. 20, August 2008, Center for Studying Health System Change, Washington, DC.

## JOINT APPOINTMENTS

**Carol S. Weisman, Ph.D.**, Professor, Public Health Sciences and Obstetrics and Gynecology, Health Policy Administration

**Thomas Lloyd, Ph.D.**, Professor, Public Health Sciences, Obstetrics and Gynecology, Pharmacology, Nutrition and Kinesiology

**Joanna Floros, Ph.D.**, Professor, Cellular and Molecular Physiology, Pediatrics and Obstetrics and Gynecology

**Marianne M. Hillemeier, Ph.D., M.P.H.**, Assistant Professor, Department of Health Policy and Administration, School of Nursing, Public Health Sciences and Obstetrics and Gynecology

**Kristen H. Kjerulff, Ph.D.**, Associate Professor, Public Health Sciences, Obstetrics and Gynecology, Health Policy and Administration, Cancer Institute

**Jan M. McAllister, Ph.D.**, Associate Professor, Cellular and Molecular Physiology and Obstetrics and Gynecology

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### Carol Weisman, PhD

Carol S. Weisman, Ph.D. is Professor of Public Health Sciences and Obstetrics and Gynecology at the Penn State College of Medicine. In the Department of Public Health Sciences, she is Chief of the Division of Health Services Research. She is Director of the Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes and Principal Investigator of the Central Pennsylvania Women's Health Study (CePAWHS). Dr. Weisman also holds a joint appointment in the Department of Health Policy and Administration, College of Health and Development, University Park.

Dr. Weisman is a sociologist and health services researcher whose research focuses on women's health, women's health care, and health policy. Currently she is Associate Editor of the journal *Women's Health Issues* and Chair of the Board of Directors of AcademyHealth, the national professional association of health services researchers and policy analysts. Prior to coming to Penn State, she was Professor at The Johns Hopkins University School of Hygiene and Public Health and at the University of Michigan School of Public Health.

### Funded Grants (Current)

1 K12 HD055882 NICHD	(Weisman)	9/26/2007 to 7/31/2012 \$2.5 Million	10% effort
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Career Development Program in Women's Health Research at Penn State. The purpose of this BIRCH project is to provide mentored research career development for junior faculty members, known as BIRCWH Scholars, who are conducting interdisciplinary research on women's health or on sex/gender differences in health.

Pennsylvania Department of Health, 6/1/2004 – 5/31/2008 50% effort  
(Principal Investigator, 50% effort). \$4.7 Million  
“Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes,”  
This is a \$4.7 million grant (non-formula tobacco settlement funds) supporting  
collaborative research, the Central Pennsylvania Women’s Health Study, which focuses  
on improving women’s health pre- and interconceptionally in order to reduce adverse  
pregnancy outcomes.

**Service/Leadership/Outreach (current)**

**Penn State**

Chief, Division of Health Services Research, Department of Public Health Sciences

Member, College of Medicine Appointments and Tenure Committee

Co-chair, Community Engagement Working Group, CTSA Application

Member, Center for Health Improvement Planning Committee

Coordinator, Women’s Health Research Interest Group

Member, Advisory Committee of the Center for Health Care Policy and Research

**Professional**

Associate Editor, *Women’s Health Issues*

Chair, Board of Directors, AcademyHealth, Washington, D.C.

Member, Select Panel on Preconception Care, Centers for Disease Control and  
Prevention

Member, The Standards of Care Project Advisory Board, National Health Law Program

Member, Advisory Committee, Jacobs Institute of Women’s Health of The George  
Washington University

**Thomas Lloyd, PhD**

**Funded Grants (Current)**

5 K30 RR 022262-08 (Lloyd) 9/19/05 – 05/31/10 40% effort  
NCCR \$284,025  
Clinical Research Curricula for Physicians/Med Students

The goal of this project is to produce more independently funded clinical investigators.

5 M01 RR 010732-12 (Paz) 06/07/05 – 03/31/10 25% effort  
NIH/NCRR \$2,396,380

General Clinical Research Center (GCRC)

This is the core grant for the General Clinical Research Center. Dr. Lloyd is the Director of Education for the GCRC.

4100020719 (Weisman) 06/01/04 – 05/31/08 21% effort  
PA Department of Health \$4,082,493

Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes

The overall goal of this project is to reduce disparities in adverse pregnancy outcomes (preterm birth and low birth weight) by improving women's preconception health and health care. The project will focus on high-risk, medically underserved populations in Central Pennsylvania, with particular emphasis on rural areas that have received little prior attention.

(George) 09/01/06 – 08/30/10 2% effort  
A.T. Still Univ. of Health Sciences \$30,556

Kirksville, MO

Curriculum & Faculty Development in Evidence-Based Medicine

### **Leadership Activities**

Chairman, Medical Student Research Program

Member, Graduate School Doctoral Thesis Education Committee

Member, Subcommittee on Human Use of Radioisotopes

Member, Clinical Research Center Advisory Committee

Member, Graduate Program in Nutrition

Member, Training Faculty for M.D./Ph.D. Program

Director, Clinical Research Center Education Program

Member, Steering Committee, Children, Youth, and Families Consortium, Penn State University

## **Joanna Floros, PhD**

### **Funded Grants (Current)**

PHS; 5 R01 ES009882-06 (Floros, J.) 9/30/2004-7/31/2009  
\$291,651 (DC Current Year)

NIH/NEI

#### **“Ozone Effects on Function of Surfactant Protein Variants”**

The specific hypothesis is that the two human SP-A gene products are not functionally equivalent with regards to their host defense function, and that ozone exposure has a differential impact on this function.

PHS; 5 R01 HL068947-05 9/1/2001-8/31/2008

NIH

#### **“The Role of Surfactant Protein Genetic Variants in Cystic Fibrosis”**

The goals of this proposal are: 1) to study associations of surfactant protein variants with CF severity and 2) to study differences in the ability of SP-A variants to modulate phagocytosis by THP-1 cells of *P. aeruginosa*.

2 R01 HL034788-20A (Floros, J.) 7/1/2007-6/30/2012  
NIH/NHLBI \$404,833 (DC Current Year)

#### **“Surfactant Proteins and Respiratory Distress Syndrome”**

To assess association and linkage between candidate marker loci (SP-A, SP-B, SP-D) and RDS in blacks and whites; 2) to investigate the impact of specific SP-B variants on RNA processing and/or translation in vitro and/or in vivo; 3) To investigate the impact of 5' UTR SP-A splice variants on translation.

### **Leadership**

Judge, Graduate Research Forum, Hershey

Judge, Graduate Research Exhibition, University Park Campus

Institutional Research Initiation, Grant Review Committee

Faculty Recruitment Committee for the Department of Cellular and Molecular Physiology

Elected Faculty Senator

Graduate Student Committee

Women in Science and Medicine, College of Medicine

PSU Senate Officer Meetings

PSU Campus College visits (Fall) and College visits at University Park (Spring)

Member in the PSU Senate Committee on Committees and Rules meetings

Guest at the PSU Board of Trustees meetings

Member of the PSU Administrative Council on Undergraduate Education

Participant in the Schreyer Honors College medal ceremonies  
Immediate Past Chair of the University Faculty Senate

Chair of the University Faculty Senate Council Subcommittee on External Affairs

Mentor to University Faculty Senate Student Caucus

Chair of the University Faculty Senate Nominating Committee

2008 Keynote Speaker, VOICE, A Networking Conference for Women in Science and Engineering, The Penn State University, University Park, PA

**Kristen H. Kjerulff, Ph.D.**

**Funded Grants (Current)**

1 R01 HD052990-01A2 (Kjerulff) 4/1/2008 to 3/31/2013

NIH

Mode of First delivery and Subsequent Child-Bearing

The main goal of this project is to investigate the extent to which cesarean delivery increases a woman's risk of subsequent infertility.

Role: PI

1 K12 HD055882 (Weisman) 9/26/2007 to 7/31/2012

NICHD

Career Development Program in Women's Health Research at Penn State

The purpose of this BIRCWH project is to provide mentored research career development for junior faculty members, known as BIRCWH Scholars, who are conducting interdisciplinary research on women's health or on sex/gender differences in health.

Role: Co-Investigator

PA Dept. of Health

Technical Support & Capacity Development for Applied HIV (& related disease)

Epidemiology Studies

This project estimates needs for HIV-related primary medical care and evaluates interventional protocols for addressing these needs.

Role: Co-Investigator

020814PC145-03/U54HD44 (Legro) 3/1/2003 to 2/29/2008  
Meharry Medical College  
MMC/PSU Cooperative Center for Research in Reproduction  
Role: Co-Investigator

4100020719 (Weisman) 6/1/2004 to 5/31/2008  
PA Department of Health  
Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes  
This is a multi-institutional center of excellence in Central Pennsylvania to reduce disparities in adverse pregnancy outcomes through observational research and intervention research on women's preconceptional health.  
Role: Co-Investigator

### **Marianne Hillemeier, Ph.D., M.P.H.**

#### **Funded Grants (current)**

Co-Investigator, "Central Pennsylvania Women's Health Study (CePAWHS): Extending the Strong Healthy Women Behavior Change Intervention to Urban Areas," (PI C Weisman), Penn State CTSA seed grant, \$74,996

Co-Investigator, "Pediatrician-Directed Screening and Intervention for Language Delays in High-Risk Children," (PI P Morgan), Penn State Children, Youth, and Families Consortium, \$20,000

Co-Investigator, "Preventing Overweight Among Mothers and Their Infants" (PIs D Symons Downs and L Birch), Penn State Diabetes and Obesity Center project planning grant, \$100,000

Co-Investigator, "Mode of First Delivery and Subsequent Childbearing," (PI K Kjerulff) R01 funded by the National Institute of Child Health and Human Development, \$4,600,000

Co-Investigator, "National Children's Study," (PI J Culhane) Pennsylvania State University subcontract in conjunction with the University of Pennsylvania study site funded by the National Institute of Child Health and Human Development, \$92,000

Co-Investigator, "National Children's Study," (PI R Ness) Pennsylvania State University subcontract in conjunction with the University of Pittsburgh study site funded by the National Institute of Child Health and Human Development, \$60,000

Co-Investigator, "Data Coordination and Analyses Center for the Community and Child Health Network," (PI V Chinchilli) funded by the National Institute of Child Health and Development, \$1,200,000

Principal Investigator, "Racial Disparities in School and Mental Health Services," R03 MH071713-01A1, funded by the National Institute of Mental Health, \$145,000

Co-Principal Investigator and Director of Research Core, "Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes," (PI , C Weisman) funded by the Pennsylvania Department of Public Health. \$4,700,000

**Jan M. McAllister, Ph.D.**

**Funded Grants (Current)**

PHS; 5 R01 HD33852-09A1 McAllister, J.M. (PI) 4/1/2006 - 3/30/2011

NIH/NICHD

“17-Hydroxylase Expression in Human Ovarian Cells”

Role: P.I.

No overlap

PHS: 1R01 HD58300-01 McAllister, J.M. (PI) 6/1/2008 – 3/31/2013

“Mechanism of Metformin Action in Normal and PCOS Theca Cells”

Role: P.I.

No Overlap

5 U54 HD34449-11 McAllister, J.M. (PI-Sub-Contract) 4/1/2008 - 3/31/2013

NIH/NICHD, Consortium w/VCU, Nestler, J. (P.I.)

“Specialized Cooperative Centers Program in Reproduction and Infertility Research U54”  
Translational Research in Polycystic Ovary Syndrome, Project III”

Role: P.I. Subcontract

No overlap

JL Huck/PA Tobacco Settlement Fund (Legro, R.S.)

3/1/2005 –12/31/2008

Obesity and Reproduction Center Planning Grant

To examine the effects of obesity on ovarian function.

Role: Co-P.I.

No overlap



## PUBLICATIONS

### Maternal Fetal Medicine

#### Serdar H. Ural, M.D.

##### Publications (Peer and Non Peer Reviewed)

Chuang C, Green M, Chase G, Dyer AM, **Ural SH** and Weisman C. Perceived risk of preterm and low birthweight in the Central Pennsylvania Womens Health Study. Am J Ob Gyn 2007; 64e1.

Merriman Jennifer B, Gonzalez Juan M, Rychik Jack, and **Ural Serdar H.** Can Digoxin and Sotalol Therapy for Fetal Supraventricular Tachycardia and Hydrops be Successful? J Reprod Med 2008; 53:357-59.

Duhl A, Paidas MJ, **Ural SH**, Branch W, Casele H, Cox-Gill J, Hamersley SI, Hyers TM, Katz V, Kuhlmann R, Netescu EA, Thorp JA and Zehnder JL. Antithrombotic therapy and pregnancy: Consensus report and recommendations for prevention and treatment of venous thromboembolic and adverse pregnancy outcomes. Am J Ob Gyn 2008; 457.

##### Abstract Presentations

Cynthia H. Chuang MD MSc, **Serdar H. Ural MD**, Michael J. Green MD MS, Gary A. Chase PhD, Carol S. Weisman PhD. Perceived Risk of Preterm and Low Birthweight Birth in the Central Pennsylvania Women's Health Study. Poster Presentation at the 28<sup>th</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008.

##### Chapters and Reviews

**Serdar H. Ural.** In: National Med Series for Independent Study: Obstetrics & Gynecology, 6<sup>th</sup> ed. Chapter 2: Fetal Physiol, page 11, 2008.

**Serdar H. Ural,** Emmanuelle Paré. In: National Med Series for Independent Study: Obstetrics & Gynecology, 6<sup>th</sup> ed. Chapter 8: Abuse in Pregnancy, page 81, 2008.

#### John J. Botti, M.D.

##### Publications (Peer and Non Peer Reviewed)

Gaylord M, Greer M and **Botti J.** *Commentary Improving perinatal health: a novel approach to improve community and adult health.* J Perinatol 28:91-96, 2008.

## **John T. Repke, M.D.**

### **Publications (Peer and Non Peer Reviewed)**

**Repke JT.** Metformin for gestational diabetes: As safe and effective as insulin? OBG Management 2008; 20:18

### **Chapters and Reviews**

Barbieri RL, **Repke JT.** Medical disorders during pregnancy. Harrison's Principles of Internal Medicine, 17<sup>th</sup> Ed. Pp. 44-9. McGraw Hill, New York 2008

**Repke, JT.** External cephalic version for breech presentation with or without spinal analgesia in nulliparous women at term: A randomized controlled trial. Obstetric Anesthesia Digest 2008; 28:180-1

## **Reproductive Endocrinology and Infertility**

### **Publications, (Peer-reviewed)**

#### **Richard S. Legro, M.D.**

**Legro RS,** Barnhart HX, Carson SA, Diamond MP, Carr BA, Schlaff WD, Coutifaris C, MCGovern PG, Cataldo N, Giudice L, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, and Myers ER for the Cooperative Multicenter Reproductive Medicine Network. Clomiphene, metformin, or both for infertility in polycystic ovary syndrome. N Engl J Med 356:551-624, 2007.

**Legro RS.** Clinical Crossroads: A 27-year-old with a diagnosis of Polycystic ovary syndrome. JAMA, 297:509-19, 2007.

**Legro RS,** Zaino R, Demers L, Kunselman AR, Gnatuk CC, Williams NI, Dodson, WC. The effects of metformin and rosiglitazone, alone and in combination, on the ovary and endometrium in polycystic ovary syndrome. Am J Obstet Gynecol 196:402.e1-10; discussion 402.e10-1, 2007.

Trussell JC, **Legro RS.** "Erectile dysfunction: Does insulin resistance play a part?" Fertil Steril 88:771-78, 2007 [Epub May 11, 2007].

Norman RJ, Dewailly D, **Legro RS,** Hickey TE, Lancet Seminar "Polycystic ovary syndrome." Lancet 25; 370(9588):685-97, 2007.

Leppert PC, **Legro RS,** Kjerulff KH. Hysterectomy and loss of fertility: Responses of premenopausal women enrolled in the Maryland Women's Health Study regarding the desire for another child. J Psychosom Med 63:269-74, 2007; [Epub Aug 2, 2007].

**Legro RS,** Myers ER for the Cooperative Multicenter Reproductive Medicine Network. Treating Infertility in the Polycystic ovary syndrome. N Engl J Med 356:1999-2001, 2007.

**Legro RS**, Polycystic ovary syndrome and infertility--Reply JAMA 297:2583, 2007.  
Urbanek M, Sam S, Legro RS, Dunaif A. Mapping of a polycystic ovary syndrome susceptibility locus to the fibrillin-3 gene on chromosome 19 p13.2 and association of the variant with a metabolic phenotype. J Clin Endocrinol Metab 92:4191-8, 2007; [Epub Sep 4, 2007].

Pauli EM, **Legro RS**, Kunselman AR, Dodson WC, Lee PA. Diminished paternity and male gonadal function with increasing obesity. Fertil Steril 2008 Feb 19; [Epub ahead of print]

Katcher HI, Kunselman AR, Gillies PJ, Demers LM, Bagshaw DM, **Legro RS**, Kris-Etherton PM. The effects of a whole grain enriched hypocaloric diet on cardiovascular disease risk factors in men and women with metabolic syndrome. Am J Clin Nutr 87:79-90, 2008.

**Legro RS**, Carson SA, Diamond MP, Schlaff WD, Carr BR, Carson SA, Coutifaris C, McGovern PG, Cataldo N, Giudice L, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Spielman RS, Ewens KG, Barnhart HX, Myers ER. Ovulatory response to treatment of polycystic ovary syndrome is associated with a polymorphism in the STK11 gene. J Clin Endocrinol Metab. 2007 Nov 13; [Epub ahead of print]

Sweet S, **Legro RS**, Coney PJ. a comparison of methods and results in recruiting white and black women into reproductive studies: the Meharry-Penn State University Cooperative Center on Reproduction experience. Contemporary Clinical Trials 2007 Nov 22; [Epub ahead of print].

**Legro, RS**, Pauli JG, Kunsleman AR, Meadow JW, Kesner JS, Zaino RJ, Demers LM, Gnatuk CL, Dodson WC. Effects of continuous versus cyclic oral contraception on vaginal bleeding. J Clin Endocrinol Metab 2007 Dec 4; [Epub ahead of print].

McGovern PG, Carson SA, Barnhart HX, Myers ER, **Legro RS**, Diamond MP, Carr BR, Schlaff WD, Coutifaris C, Cataldo NA, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Giudice LC; For the NICHD-Reproductive Medicine Network. Medication adherence and treatment success in the National Institute of Child Health and Human Development-Reproductive Medicine Network's Pregnancy in Polycystic Ovary Syndrome trial. Fertil Steril. 2007 Dec 13; [Epub ahead of print].

Sam S, Sung YA, **Legro RS**, Dunaif A. Evidence for pancreatic beta-cell dysfunction in brothers of women with polycystic ovary syndrome. Metabolism 57:84-9, 2008

McGovern PG, Carson SA, Barnhart HX, Myers ER, **Legro RS**, Diamond MP, Carr BR, Schlaff WD, Coutifaris C, Cataldo NA, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Giudice LC; For the NICHD-Reproductive Medicine Network. Medication adherence and treatment success in the National Institute of Child Health and Human Development-Reproductive Medicine Network's Pregnancy in Polycystic Ovary Syndrome trial. Fertil Steril. 2007 Dec 13; [Epub ahead of print].

Katcher HI, Kunselman AR, Dmitrovic R, Demers LM, Gnatuk GL, Kris-Etherton PM, **Legro RS**. Comparison of hormonal and metabolic markers after a high-fat, Western meal compared with a low-fat, high-fiber meal in women with polycystic ovary syndrome. Fertil Steril 2008 Mar 8; [Epub ahead of print]

Kent SC, Gnatuk CL, Kunselman AR, Demers LM, Lee PA, **Legro RS**. Hyperandrogenism and Hyperinsulinism in Children of Women with Polycystic ovary syndrome: A Controlled Study. *J Clin Endocrinol Metab*. 2008 Feb 12; [Epub ahead of print]

### **Publications, (Non Peer-reviewed)**

**Legro RS**. Pregnancy considerations in Polycystic ovary syndrome. *Clin Obstet Gynecol*. 50(1):295-304, 2007.

**Legro RS**. Expert Commentary Should all obese women be screened for Polycystic ovary syndrome? *Ob/Gyn Management*. 19(2): 23-4 2007.

**Legro RS** Response to Letter "My 24 year old niece has just been diagnosed with Polycystic ovary syndrome". *Saturday Evening Post*. May 2007.

**Legro RS** Interview on the genetics of Polycystic ovary syndrome, *Androgen Excess Society Newsletter*, Winter 2007.

**Legro RS**, Baillergeon JP Should metformin be used as front line therapy for infertility in women with Polycystic ovary syndrome? *Sexuality, Reproduction, and Menopause*, 5(2): 17-19, 2008.

**Legro RS** Metformin for Infertility in polycystic ovary syndrome: Going, Going, Gone. *Contemporary Ob/Gyn*, 52 (12):54-61, 2007.

**Legro RS** New directions In Polycystic ovary syndrome *Semin Reprod Med* 26(1):3-4, 2008.

Coney P, Ladson G, Sweet S, **Legro RS**. Does polycystic ovary syndrome increase the disparity in metabolic syndrome and cardiovascular-related health for African-American women? *Semin Reprod Med*. 26(1):35-8, 2008.

Katcher HI, **Legro RS**, Kris-Etherton PI. The effects of a whole grain-enriched hypocaloric diet on cardiovascular disease risk factors in men and women with metabolic syndrome. *IAS Website* [www.athero.org](http://www.athero.org)

### **Book Chapters:**

Dmitrovic R, **Legro RS**. Chapter 11: Polycystic ovary syndrome in "Treatment of the Obese Patient" *Contemporary Endocrinology*, Eds. Kushner RF, Bessesen DH. Humana Press 2007.

Flaherty EE, **Legro RS**. Obesity: Recognition and Treatment in Women. In *Reproductive Endocrinology and Infertility*. Ed Vivian Lewis, M.D. Landes Bioscience Vademecum, 2007

Demissie M, **Legro RS**, Dunaif A. The insulin resistance of Polycystic ovary syndrome. Insulin resistance and Polycystic Ovarian Syndrome: Pathogenesis, Evaluation and Treatment Eds Diamanti-Kandarakis E, Humana Press, Totowa NJ 2007.

**Legro RS**, Winans E. Acquired Polycystic ovary syndrome: epilepsy, bipolar disorder, and the role of anti-epileptic drugs. In Polycystic ovary syndrome: Current Concepts and Controversies from the Ovary to the Pancreas. Eds. Andrea Dunaif, Jeff Chang, Steve Franks, Richard Legro. Humana Press, Totowa NJ 2007

**Legro RS**. Clinical Evaluation of Polycystic ovary syndrome in Endocrine Update: Polycystic ovary syndrome, Eds Ricardo Azziz, Springer Press, 2007.

#### **Books:**

Eds. Dunaif A, **Legro RS**, Chang RJ, Franks S. Polycystic Ovary Syndrome: Current Concepts and Controversies, From the Ovary to the Pancreas. Humana Books 2007.

#### **Monographs:**

Azziz R, Carmina A, **Legro RS**, Escobar-Morreale H, Futterweit W, Witchel SF, Jannssen OE. *Position Statement: The Androgen Excess Society evidence-based criteria for defining the polycystic ovary syndrome as a predominantly hyperandrogenic syndrome. Complete task force report. Available online.*

#### **Abstracts:**

Macaya R, **Legro RS**, Gogtas H, Dunaif A. Increased risk of hyperandrogenemia in obese women without clinical evidence for androgen excess, Poster presentation at the Annual Meeting of the North American Society for the Study of Obesity, 2007.

Urbanek M, **Legro RS**, Dunaif A, Biyasheva A. Identification of novel TCF7L2 associated Polycystic ovary syndrome (PCOS) susceptibility locus which is independent of the type 2 diabetes locus identified in Caucasian populations Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Urbanek M, Biyasheva A, D'Souza J, Nampiaparampil BS, Sefton E, Ackerman C, **Legro RS**, Dunaif A. The role of genetic variation in the lamin a/c gene in the etiology of Polycystic ovary syndrome (PCOS). Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Coney P, Ladson GW, Sweet SD, Kunselman AR, Demers LM, **Legro RS**, Dodson WC. Correlates of serum 25-ohd levels in reproductive-age black and white women. Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

**William C. Dodson, M.D.**

**Publications (Peer and Non Peer Reviewed)**

Legro RS, Zaino R, Demers L, Kunselman AR, Gnatuk CC, Williams NI, **Dodson, WC**. The effects of metformin and rosiglitazone, alone and in combination, on the ovary and endometrium in polycystic ovary syndrome. *Am J Obstet Gynecol* 196:402.e1-10; discussion 402.e10-1, 2007.

Dykes TM, Siegel C, **Dodson WC**. Congenital uterine anomalies: review and self-assessment module. *AJR*, 189:S1-S10, 2007

Booker CJ, Yarwood RL, **Dodson WC**. Dislodged Essure microinsert. *Fertil Steril*, 89:964, 2008

Pauli EM, Legro RS, Kunselman AR, **Dodson WC**, Lee PA. Diminished paternity and male gonadal function with increasing obesity. *Fertil Steril* 2008 Feb 19; [Epub ahead of print]

**Abstracts**

Coney P, Ladson GW, Sweet SD, Kunselman AR, Demers LM, Legro RS, **Dodson WC**. Correlates of serum 25-ohd levels in reproductive-age black and white women. Presented at the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Wickenheisser JK, **Dodson WC**. Human cumulus cells isolated during ART: steroid biosynthesis and gonadotropin responsiveness in culture. Presented at the Society for Gynecologic Investigation, San Diego, 2008

**Stephanie J. Estes, M.D.**

**Book Chapters:**

**Estes SJ** Disorders of prolactin secretion. In: Somkuti SG, ed. *Obstetrics and Gynecology Pearls of Wisdom, Third Edition*. Boston (MA): Boston Medical Publishing Corporation; 2008.

**Estes SJ**. Amenorrhea. In: Somkuti SG, ed. *Obstetrics and Gynecology Pearls of Wisdom, Third Edition*. Boston (MA): Boston Medical Publishing Corporation; 2008.

**Estes SJ**, Ginsburg ES. Infertility treatment and assisted reproduction in HIV infected couples. In: UpToDate, Rose, BD (Ed), UpToDate, Wellesley, MA, 2008.

**Carol L. Gnatuk, M.D.**

**Publications (Peer and Non Peer Reviewed)**

Legro RS, Zaino R, Demers L, Kunselman AR, **Gnatuk CC**, Williams NI, Dodson, WC. The effects of metformin and rosiglitazone, alone and in combination, on the ovary and endometrium in polycystic ovary syndrome. *Am J Obstet Gynecol* 196:402.e1-10; discussion 402.e10-1, 2007.

Legro, RS, Pauli JG, Kunsleman AR, Meadow JW, Kesner JS, Zaino RJ, Demers LM, **Gnatuk CL**, Dodson WC. Effects of continuous versus cyclic oral contraception on vaginal bleeding. *J Clin Endocrinol Metab* 2007 Dec 4; [Epub ahead of print].

Kent SC, **Gnatuk CL**, Kunselman AR, Demers LM, Lee PA, **Legro RS**. Hyperandrogenism and Hyperinsulinism in Children of Women with Polycystic ovary syndrome: A Controlled Study. *J Clin Endocrinol Metab*. 2008 Feb 12; [Epub ahead of print]

Katcher HI, Kunselman AR, Dmitrovic R, Demers LM, **Gnatuk GL**, Kris-Etherton PM, Legro RS. Comparison of hormonal and metabolic markers after a high-fat, Western meal compared with a low-fat, high-fiber meal in women with polycystic ovary syndrome. *Fertil Steril* 2008 Mar 8; [Epub ahead of print]

**WOMEN'S HEALTH**

**Gerald J. Harkins, M.D.**

**Publications (Peer and Non Peer Reviewed)**

**Harkins GJ**, "Pelvic Mass; Review Questions" Self Assessment in Obstetrics and Gynecology. *Hospital Physician* 43(1) 27-29, 2007

**Colin MacNeill, M.D.**

**Publications (Peer and Non Peer Reviewed)**

Kamdar N, Fisher L, **MacNeill C**. Improvement in Vestibulitis Symptoms on Treatment with Leukotriene Inhibitor Montelukast. *Journal of Reproductive Medicine*. 52(10):912-6, 2007 Oct.

**Jaimey Pauli, M.D.**

**Publications (Peer and Non Peer Reviewed)**

Legro, RS, **Pauli JG**, Kunsleman AR, Meadow JW, Kesner JS, Zaino RJ, Demers LM, Gnatuk CL, Dodson WC. Effects of continuous versus cyclic oral contraception on vaginal bleeding. *J Clin Endocrinol Metab* 2007 Dec 4; [Epub ahead of print].

## **Richard C. Pees, M.D.**

### **Publications (Peer and Non Peer Reviewed)**

**Pees, R.C.**, et. al. (2007). Professionalism in Medical Education: The Development and Validation of a Survey Instrument to Assess Attitudes Toward Professionalism. *Medical Teacher*, 29(2), e58-e62.

## **Joint Appointments**

## **Kristen H. Kjerulff, Ph.D**

### **Publications, (Peer-reviewed)**

Leppert PC, Legro RS, **Kjerulff KH**. Hysterectomy and loss of fertility: Responses of premenopausal women enrolled in the Maryland Women's Health Study regarding the desire for another child. *J Psychosom Med* 63:269-74, 2007; [Epub Aug 2, 2007].

## **Marianne M. Hillemeier, M.P.H., Ph.D.**

### **Publications (Peer and Non Peer Reviewed)**

Paul I, Lehmann EB, Suliman AK, **Hillemeier MM**. 2008. Perinatal disparities for black mothers and their newborns in Pennsylvania. *Maternal and Child Health Journal* 12:452-460.

**Hillemeier MM**, Weisman CS, Chase GA, Dyer AM. 2008. Mental health status among rural women of reproductive age: findings from the Central Pennsylvania Women's Health Study (CePAWHS). *American Journal of Public Health* 98(7):1271-1279.

Velott DL, Baker SA, **Hillemeier MM**, Weisman CS. 2008. Participant recruitment to a randomized trial of a community-based behavioral intervention for pre- and interconceptional women: findings from the Central Pennsylvania Women's Health Study (CePAWHS). *Women's Health Issues* 18(3):217-224.

**Hillemeier MM**, Weisman CS, Chase GA, Dyer AM, Shaffer ML. 2008. Women's preconceptional health and use of health services: implications for preconception care. *Health Services Research* 43 (1 pt 1): 54-75.

Weisman CS, **Hillemeier MM**, Chase GA, Misra DP, Chuang CH, Parrott R, Dyer A-M. 2007. Women's perceived control of their birth outcomes in the Central Pennsylvania Women's Health Study (CePAWHS): implications for the use of preconception care. *Women's Health Issues* 18(1):17-25.

**Hillemeier MM**, Foster EM, Heinrichs B, Heier BJ, Conduct Problems Prevention Research Group 2007. Racial differences in parental reports of attention-deficit/hyperactivity disorder behaviors. *Journal of Developmental and Behavioral Pediatrics* 28(5):353-361.



Weisman CS, Grimley DM, Annang L, **Hillemeier MM**, Chase GA, Dyer AM. 2007. Vaginal douching and intimate partner violence: is there an association? *Women's Health Issues* 17:310-315.

**Hillemeier MM**, Weisman CS, Chase GA, Dyer AM. 2007. Individual and community predictors of preterm birth and low birthweight along the rural-urban continuum in Central Pennsylvania. *Journal of Rural Health* 23(1):42-48.

Miller K, Yost B, Flaherty S, **Hillemeier MM**, Chase GA, Weisman CS, Dyer AM. 2007. Health status, health conditions, and health behaviors among Amish women: results from the Central Pennsylvania Women's Health Study (CePAWHS). *Women's Health Issues* 17(3):162-171.

Bai Y, **Hillemeier MM**, Lengerich EJ. 2007. Racial/ethnic disparities in symptom severity among children hospitalized with asthma. *Journal of Health Care for the Poor and Underserved* 18:54-61.

### **Book Chapters**

Scanlon DP, **Hillemeier MM**. 2008. The limits of relying on employers in an intersectoral public health partnership. Chapter in Rosner D, Markowitz G, Colgrove J (eds), *The Contested Boundaries of American Public Health*. New Brunswick NJ: Rutgers University Press.

### **Other Publications**

**Hillemeier MM**. 2008. Book Review: Fighting the Diseases of Poverty, edited by P Stevens. *New England Journal of Medicine* 359(14):1530-1531.

**Hillemeier MM**, Bai Y, Gusic ME. 2007. Preparing for asthma-related emergencies in schools: in reply. *Pediatrics* 119:652.

### **Thomas Lloyd, Ph.D.**

#### **Publications (Peer Reviewed)**

Petit MA, Beck TJ, Hughes JM, Lin H-M, Bentley C, **Lloyd T**. Proximal femur mechanical adaptation to weight gain in late adolescence: A six –year longitudinal study. *J Bone Mineral Research* 23: 180 – 188, 2008.

### **Carol S. Weisman, Ph.D**

#### **Publications (Peer and Non Peer Reviewed)**

Chuang C, Green M, Chase G, Dyer AM, Ural SH and **Weisman C**. Perceived risk of preterm and low birthweight in the Central Pennsylvania Womens Health Study. *Am J Ob Gyn* 2007; 64e1.

## **Abstracts**

Cynthia H. Chuang MD MSc, Serdar H. Ural MD, Michael J. Green MD MS, Gary A. Chase PhD, **Carol S. Weisman PhD**. Perceived Risk of Preterm and Low Birthweight Birth in the Central Pennsylvania Women's Health Study. Poster Presentation at the 28<sup>th</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008

## PRESENTATIONS

### **Carol Gnatuk, MD**

“Gynecologic Care of the Breast Cancer Survivor”

Women’s Health: Ages and Stages, Penn State Milton S. Hershey Medical Center and College of Medicine

“Alternative Medicine and Menopause” Grand Rounds

Department of OB/GYN, Penn State Milton S. Hershey Medical Center and College of Medicine

### **Richard Legro, MD**

Wickenheisser JK, Legro RS, McAllister JM. Granulosa cells isolated from PCOS women have altered steroid biosynthesis and CYP19 and CYP11A1 Gene Expression in Long Term Culture. Poster presentation at the Annual Meeting of the Society for Gynecologic Investigation, Reno NV, 2007.

Legro RS, Carson SA, Diamond MP, Schlaff WD, Carr BR, Carson SA, Coutifaris C, MCGovern PG, Cataldo N, Giudice L, Steinkampf MP, Nestler JE, Gosman G, Leppert PC, Spielman RS, Ewens KG, Barnhart HX, Myers ER. A SNP in the Liver Kinase Gene LKB1 is Associated with Failure to Ovulate on Metformin Therapy. Oral presentation at the Annual Meeting of the Society for Gynecologic Investigation, Reno NV, 2007

Pauli JM, Zaino RJ, Gnatuk CG, Kesner JS, Meadows JW, Demers LM, Kunselman AR, Dodson WC, Legro RS. An RCT of Extended Cycle vs 28d Cyclic OCP Therapy on Endometrial and Ovarian Function. Poster presentation at the Annual Meeting of the Society for Gynecologic Investigation, Reno NV, 2007

Katcher HI, Legro RS, Kris-Etherton PM. Treatment of metabolic syndrome with a whole-grain enriched hypocaloric diet. Oral Presentation at the Annual Meeting of Experimental Biology, Washington D.C., 2007

Vgontzas AN, Basta M, Papaliagka M, Lin HM, Bixler EO, Chrousos GP, Legro RS. Insulin Resistance is a risk factor for daytime sleepiness in obese men with Sleep Apnea. Oral presentation to the 89<sup>th</sup> Annual Meeting of the Endocrine Society, Toronto, Ont, CA, 2007.

Macaya R, Legro RS, Urbanek M, Dunaif A. Evidence for Increased Fecundity in PCOS Families. Poster Presentation at the 89<sup>th</sup> Annual Meeting of the Endocrine Society, Toronto, Ont, CA, 2007.

Katcher HI, Kunselman AR, Dmitrovic R, Demers LM, Gnatuk GL, Legro RS. Prolonged reduction in testosterone levels after a high fat meal compared with a high fiber meal in women with polycystic ovary syndrome. Oral Presentation at the 89<sup>th</sup> Annual Meeting of the Endocrine Society, Toronto, Ont, CA, 2007.

Macaya R, Legro RS, Gogtas H, Dunaif A. Increased risk of hyperandrogenemia in obese women without clinical evidence for androgen excess, Poster presentation at the Annual Meeting of the North American Society for the Study of Obesity, 2007.

Urbanek M, Legro RS, Dunaif A, Biyasheva A. Identification of novel TCF7L2 associated Polycystic ovary syndrome (PCOS) susceptibility locus which is independent of the type 2 diabetes locus identified in Caucasian populations Submitted to the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Urbanek M, Biyasheva A, D'Souza J, Nampiaparampil BS, Sefton E, Ackerman C, Legro RS, Dunaif A. The role of genetic variation in the lamin a/c gene in the etiology of polycystic ovary syndrome (PCOS). Submitted to the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Coney P, Ladson GW, Sweet SD, Kunselman AR, Demers LM, Legro RS, Dodson WC. Correlates of serum 25-ohd levels in reproductive-age black and white women. Submitted to the 90<sup>th</sup> Annual Meeting of the Endocrine Society, San Francisco, CA, 2008.

Scientific Committee and Organizer, XVIth Ovarian Workshop, San Antonio Texas, July 19-23<sup>rd</sup>, 2007

Speaker, "Treating Infertility in PCOS with metformin, clomiphene, or aromatase inhibitors", "Selection of patients for infertility treatments", "Newer treatments to induce ovulation in women with PCOS", XLIV Annual Meeting of the Asociacion Mexicana de Medicina de la Reproduccion, A.C., Puerto Vallarta, Mexico, July 25-28<sup>th</sup>, 2007

Scientific Committee and Organizer, 2<sup>nd</sup> Peacocks Forum, Castello di Spaltenna, Tuscany Italy, September 20-23<sup>rd</sup>, 2007

Faculty Member, Postgraduate Course: "Polycystic ovary syndrome: Improving Reproduction and Pregnancy Outcomes", 63rd Annual Meeting of the American Society for Reproductive Medicine, Washington D.C. October 13, 2007.

Speaker, Symposium "ASRM/ESHRE Consensus on Treatment of PCOS for Infertility". 63<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, Washington D.C. October 16, 2007.

Speaker, "State of the ART Management of PCOS", District VII Annual Meeting of the American College of Obstetricians and Gynecologists, Oct 27, 2007, Henderson, NV.

Speaker "Where do insulin sensitizing agents fit in the management of PCOS" at "Polycystic ovary syndrome: A Condition of our Time" at the Royal College of Obstetricians and Gynecologists, London, UK Nov 15-16<sup>th</sup>, 2007

Speaker "Update on the Pathophysiology of PCOS" and "Role of Metformin as First Line Therapy in Ovulation Induction" at Polycystic Ovary Syndrome: From Reproductive Disorders to Metabolic Disturbances, Medical Congress on the Auspicious Occasion of His Majesty's the King's 80<sup>th</sup> Birthday Anniversary, Bangkok Convention Centre at Central World, Jan 31-Feb 1, 2008.

Speaker and Moderator, "Trials and Tribulations of Clinical Trials" in Mini-Symposia: Epidemiology/Clinical Trials. 59<sup>th</sup> Annual Meeting of the Society for Gynecologic Investigation, San Diego CA, March 27<sup>th</sup>, 2008.

Speaker, Course for residents “PEARLS IN REPRODUCTIVE ENDOCRINOLOGY FOR THE GENERALIST” “If You Know PCOS You Know All of Reproductive Endocrinology

Course for Residents”. 63<sup>rd</sup> Annual Meeting of the American Society for Reproductive Medicine, Washington D.C. October 14, 2007.

Speaker, “Diagnostic Considerations in PCOS” and “Lessons for the treatment of PCOS from PPCOS” Update in PCOS by PCOStrategies, Asheville, N.C., Oct. 27, 2007.

Speaker, Considerations for the Evaluation and Management of Polycystic ovary syndrome, PRI-Med Updates in Women’s Health, Chicago, IL, Nov. 3, 2007

Visiting Professor, Indiana University School of Medicine, “The role of insulin sensitizers in the management of infertility in PCOS” Grand Rounds Dept Ob/Gyn, and “Family Studies in PCOS- where we have been and where we are going?” Grand Round Dept Peds Endo. November 28, 2007.

Grand Rounds. Dartmouth Medical School Hitchcock Medical Center. Metformin for Infertility: The ongoing Saga. February 21, 2008.

Grand Rounds, Division of Medical Endocrinology, Cornell University School of Medicine, New York, NY, March 5, 2008

Palladino Memorial Lecture, Annual Ob/Gyn Resident Research Day, Dept of Ob/Gyn, West Virginia School of Medicine, Morgantown, WV, March 14, 2008.

### **William Dodson, MD**

Pauli JM, Zaino RJ, Gnatuk CL, Kesner JS, Meadows JW, Demers LM, Kunselman AR, Dodson WC, Legro RS. An RCT of extended cycle vs 28d cyclic OCP therapy on endometrial and ovarian function. Presented at the Society for Gynecologic Investigation, Reno, 2007

Wickenheisser JK, Dodson WC. Human cumulus cells isolated during ART: steroid biosynthesis and gonadotropin responsiveness in culture. Presented at the Society for Gynecologic Investigation, San Diego, 2008

Coney P, Ladson GM, Sweet SD, Kunselman AR, Demers LM, Legro RS, Dodson WC. Correlates of serum 25-OHD levels in reproductive-age Black and White women. To be presented at the Endocrine Society, San Francisco, 2008

### **Carie D’Agata, MD**

Resident Book Chapter “Emotional Aspects of Gynecology” Comp Gyn Chapter 9

2007-2008 Problem Based Learning Lecture “Adolescent Gynecology”

2007-2008 Problem Based Learning Facilitator March 31, April 2, 4, 7, 9, 11, 2008

Invited Speaker: Presented to F&C Medicine 2<sup>nd</sup> Year Residents “Sexual History Taking”

Invited Speaker: AMWA Mentor Breakfast April 1, 2008

Invited Speaker: Lecture for Internal Medicine Residents “Menopause Management”

**Matthew Davies, MD**

Resident Lecture “History, Physical Examination, and Preventative Health Care”  
Comp Gyn chapter 7

Resident Lecture “Hysteroscopy and Intrauterine Procedures”

Resident Lecture “Overactive Bladder”

Resident Lecture Comp Gyn Chapter 18 “Benign Gynecologic Lesions”

Resident Lecture “Infections of the Upper Genital Tract” Comp gyn chapter 23

Resident Lecture “Malignant Diseases of the Cervix” Comp Gyn Chapter 29

Resident Lecture “Hyperandrogenism” Comp Gyn Chapter 40

Problem Based Learning Reproductive Medicine Course “Breast Development &  
Physiology of Lactation”

Problem Based Learning Facilitator Reproductive Medicine March 31, April 2, 4, 7, 9, 11,  
2008

**Rae Kennedy, MD**

Chapter Review “Preoperative Counseling and Management” Comp Gyn Chapter 24

Chapter Review “Malignant Diseases of the Cervix” Comp gyn chapter 29

Chapter Review “Neoplastic Diseases of the Ovary” Comp gyn chapter 32

Simulation Lab Pelvic Exam Training

Student Lectures February 1, 2008 Chapters 12, 14, 15, 20

**Colin MacNeill, MD**

Invited Speaker-Obstetrics and Gynecology Grand Rounds “Vaginitis Update” The Penn  
State Milton S. Hershey Medical Center

## **Richard Pees, MD**

Chapter Review “Endometriosis” Comp Gyn Chapter 19, 11/14/2007

Chapter Review “Urogynecology” Comp Gyn Chapter 21, 12/19/2007

Chapter Review “Neoplastic Diseases of the Uterus” Comp Gyn Chapter 32, 3/12/2008

## **John T. Repke, MD, FACOG**

### **Invited Lectures**

The Margaret Williams Endowed Lecture. An evidence based approach to the management of mild and severe preeclampsia. 34<sup>th</sup> Annual Regional Perinatal Symposium. State University of New York – Upstate Medical University. October 18, 2007, Syracuse, NY.

Severe Preeclampsia; Etiology, diagnosis, management and recurrence. Women’s Health Summit; Hilton New York. May 15-16, 2008, New York, NY

Visiting Professor – Colegio Mexicano de Especialistas en Ginecología y Obstetricia, A.C.; Curso Internacional Medicina Materno-Fetal. May 28-31, 2008, Mexico City, Mexico

Course Director: Controversies in Perinatal Medicine; Evidence-Based Solutions. SA 060 Post Graduate Course; American College of Obstetricians and Gynecologists Annual Clinical Meeting, May 3, 2008, New Orleans, LA

## **Serdar Ural, MD**

Cynthia H. Chuang MD MSc, Serdar H. Ural MD, Michael J. Green MD MS, Gary A. Chase PhD, Carol S. Weisman PhD. Perceived Risk of Preterm and Low Birthweight Birth in the Central Pennsylvania Women’s Health Study. Poster Presentation at the 28<sup>th</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008.

Invited Lecture: “Antiphospholipid Antibody Syndrome” Turkish Obstetrics and Gynecology Association, National Training Symposium (CME) October 26, 2007 - Antalya, Turkey

Invited Lecture: “4-D Ultrasonography in Pregnancy” Turkish Obstetrics and Gynecology Association, National Training Symposium (CME) October 27, 2007 - Antalya, Turkey

Invited Lecture: “Amniocentesis or CVS” Turkish Obstetrics and Gynecology Association, National Training Symposium (CME) October 28, 2007 - Antalya, Turkey

Invited Lecture: “Antiphospholipid Antibody Syndrome and Pregnancy” Grand Rounds, Department of Obstetrics & Gynecology, Penn State Hershey Medical Center January 23, 2008 - Hershey, Pennsylvania

Invited Lecture: “Placental Abnormalities” Labor & Delivery nurse education, MSHMC

Invited Lecture: "HSV and Pregnancy" Grand Rounds, Department of Obstetrics & Gynecology, Mt. Nittany Medical Center

Invited Lecture: "Prediction and Treatment of Preterm Labor and Delivery in Symptomatic and Asymptomatic Women" Controversies in Perinatal medicine: Evidence Based Solutions, ACOG postgraduate course May 3, 2008 - New Orleans, Louisiana

Invited Lecture: "Prenatal Screening: What Method is Best and What do the Data Really Show?"

Controversies in Perinatal medicine: Evidence Based Solutions, ACOG postgraduate course May 3, 2008 - New Orleans, Louisiana

Invited Lecture: "Stem Cell Transplantation" Round Table Lecture, ACOG Annual Clinical Meeting May 5, 2008 - New Orleans, Louisiana

Invited Lecture: "3D Ultrasound and Pregnancy" Controversies in Perinatal medicine: Evidence Based Solutions, Round Table Lecture, ACOG Annual Clinical Meeting May 6, 2008 - New Orleans, Louisiana

Invited Lecture: "Antiphospholipid Antibody Syndrome and Pregnancy" Grand Rounds, Department of Obstetrics & Gynecology, Pinnacle Health June 19, 2008 - Harrisburg, Pennsylvania

Invited Lecture: "Osteochondrodysplasias" Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MS Hershey Medical Center June 20, 2008 - Hershey, Pennsylvania

### **John Botti, MD**

Botti J, Jones R. Maternal Thermoregulatory Responses to Aerobic Exercise During Pregnancy. Poster Presentation, 28<sup>th</sup> Annual Meeting of the Society for Maternal Fetal Medicine, Dallas, Texas, February 2008.

Cheung Esther, Goldenberg David, Botti John J. Advanced Oral Tongue Cancer in a 22-year old Pregnant Female. Triological Society Eastern Section Meeting, Philadelphia, PA, January 2008.

"Substance Abuse in Pregnancy" WIC, PA state agency staff meeting (non CME) September 13, 2007 – Harrisburg, PA

"Trauma in Pregnancy: Current Concepts" Penn State Trauma Symposium, MSHMC (CME) September 14, 2007 - Grantville, PA

"Morbidity & Mortality (2<sup>nd</sup> qtr 2007)" Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) September 21, 2007 – Hershey, PA

"CePAWHS Phase I Obesity Data Dissemination Program: Relevant Findings in Central Pennsylvania Reproductive-Age Women"



Health Thematic Initiative Forum, Penn State University September 24, 2007 - State College, PA

“Late Preterm Birth: Realities and Issues” Grand Rounds, Department of Obstetrics & Gynecology, MSHMC (CME)

“Near Term Pregnancy: What really happens to those kids?” National Perinatal Association Annual Meeting, New Beginnings for Perinatal Health: Medical, Social and Community Integration, breakout session (CME) September 28, 2007 – New Orleans, LA

“Late and Preterm Births” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) October 5, 2007 – Hershey, PA

“Late Preterm Births” Mount Nittany Medical Center, Department of Obstetrics & Gynecology (CME) November 8, 2007 – State College, PA

“Trauma in Pregnancy” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) November 9, 2007 – Hershey, PA

“Update on Drug Use by Mothers in Pregnancy and the Affect on the Babies” Waynesboro Hospital Outreach Program (CME) November 26, 2007 – Waynesboro, PA

“Morbidity & Mortality (3<sup>rd</sup> qtr 2007)” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) November 30, 2007 – Hershey, PA

“Pandemic Influenza in Pregnancy” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) December 14, 2007 – Hershey, PA

“Prevention of Premature Labor” Department of Obstetrics & Gynecology, Good Samaritan Hospital Outreach Program (CME) December 27, 2007 – Lebanon, PA

“Perinatal Case Review: Pathology” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) February 15, 2008 – Hershey, PA

“Perinatal Case Review” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) February 29, 2008 – Hershey, PA

## **Anthony Ambrose, MD**

### **Invited Lectures**

“Pregnancy and Arthritis” Arthritis Foundation, 2007 Juvenile Arthritis Conference: Young Adult Breakout Session Moderator (CME) July 3, 2007 – Hershey, PA

“CIS: IUFD” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) October 26, 2007 – Hershey, PA

“Obstetrical Ultrasound Basics” 8<sup>th</sup> Annual Pediatric Conference: Touching the Future of Children Conference, MSHMC (CME) November 6, 2007 – Harrisburg, PA

“Highlights of the 2007 ISUOG Conference” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) January 25, 2008 Hershey, PA

“Not Your Usual Medication in Pregnancy” Grand Rounds, Department of Obstetrics & Gynecology, MSHMC (CME) February 13, 2008 – Hershey, PA

“Perinatal Case Review” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) February 15, 2008 – Hershey, PA

“The U.S. Congress and Ob/Gyn” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) April 18, 2008 – Hershey, PA

“M & M (1<sup>ST</sup> Qtr 2008)” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) June 6, 2008 – Hershey, PA

“Morbidity & Mortality (4th qtr 2007)” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) March 7, 2008 – Hershey, PA

“SMFM 2007 Meeting Highlights” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) April 4, 2008 – Hershey, PA

“Prevention of Cesarean Associated Infections” Perinatal Conference, Departments of Obstetrics & Gynecology and Pediatrics, MSHMC (CME) May 23, 2008 – Hershey, PA

**2007 – 2008 OBSTETRICS AND GYNECOLOGY  
GRAND ROUNDS**

<b>Date</b>	<b>Title</b>	<b>Speaker</b>
July 11, 2007	M & M Conference	Corenthian Booker, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
August 1, 2007	M & M Conference	Sangeetha R. Konda, MD Danielle Hazard, MD Thanh Truong, MD Amanda Wait, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Sept. 5, 2007	M & M Conference	
Sept. 12, 2007	“Update on the Systemic Management of Early Breast Cancer”	Harold Harvey, MD Professor of Medicine, Division of Hematology Oncology Penn State College of Medicine
Sept. 19, 2007	“Surgical Repair of Pelvic organ Prolapse: Keys to Success”	Lily Arya, MD Assistant Professor and Program Director Division of Urogynecology and Reconstructive Pelvic Surgery University of Pennsylvania
Sept. 26, 2007	“Late Preterm Birth: Realities and Issues”	John J. Botti, MD Professor Division of Maternal Fetal Medicine Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Oct. 3, 2007	M & M Conference	
Oct. 10, 2007	“Breast Imaging Update”	Susann Schetter, D.O. Department of Radiology, Section Chief Breast Imaging Penn State Milton S. Hershey Medical Center

**2007 – 2008 OBSTETRICS AND GYNECOLOGY  
GRAND ROUNDS, (CONT.)**

<b>Date</b>	<b>Title</b>	<b>Speaker</b>
Oct. 17, 2007	“Vaginitis Update”	Colin MacNeill, MD Associate Professor Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Oct. 24, 2007	“M & M Conference”	
Oct. 31, 2007	No Scheduled Grand Rounds	
Nov. 7, 2007	M & M Conference	Jaimey Pauli, MD Danielle Hazard, MD Thanh Truong, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Nov. 14, 2007	“Applications of MRI focused ultrasound and Robotic surgery in Gyn”	Stephanie Estes, MD Assistant Professor, Division of Reproductive Endocrinology Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Nov. 21, 2007	No OB/GYN Grand Rounds due to holiday.	
Nov. 28, 2007	“Twin-Twin Transfusion Syndrome: Myths & Facts”	Ruben A. Quintero Professor & Director Maternal Fetal Medicine University of South Florida
Dec. 5, 2007	M & M Conference	
Dec. 12, 2007	“Controversies in Obstetric Anesthesia”	Sonia Vaida, MD Director, Obstetric Anesthesia Penn State Milton S. Hershey Medical Center
Dec. 19, 2007	“Pituitary Tumors”	Andrea Manni, MD Professor of Medicine Chief, Division of Endocrinology, Diabetes, and Metabolism Penn State Milton S. Hershey Medical Center
Dec. 26, 2007	No OB/GYN Grand Rounds due to holiday.	

**2007 – 2008 OBSTETRICS AND GYNECOLOGY  
GRAND ROUNDS, (CONT.)**

<b>Date</b>	<b>Title</b>	<b>Speaker</b>
Jan. 2, 2008	No OB/GYN Grand Rounds due to holiday.	
Jan. 9, 2008	M & M Conference	
Jan. 16, 2008	“Surgical Techniques for Pelvic Organ Prolapse”	Babak Vakili, MD, FACOG Director, Division of Urogynecology Christiana Hospital Delaware
Jan. 23, 2008	“Antiphospholipid Antibody Syndrome and Pregnancy”	Serdar Ural, MD Associate Professor Director, Division of Maternal Fetal Medicine Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Jan. 30, 2008	“Nausea and Vomiting of Pregnancy-Update on Pharmacologic Treatment Options”	Robert Rossi, R.Ph. Matria Healthcare, Inc.
Feb. 6, 2008	M & M Conference	
Feb. 13, 2008	“Not Your Usual Medication in Pregnancy Talk”	Anthony Ambrose, MD Associate Professor Maternal Fetal Medicine, Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
Feb. 20, 2008	“What’s New in Type 2: diabetes 2008?”	Robert A. Gabbay, MD Executive Director Department of Medicine, Division of Endocrinology, Diabetes and Metabolism Penn State College of Medicine
Feb. 27, 2008	Canceled	
March 5, 2008	M & M Conference	
March 12, 2008	“The Future of Education in Obstetrics and Gynecology”	Sterling Williams, MD Vice President Education ACOG , Women’s Health Care Physicians

**2007 – 2008 OBSTETRICS AND GYNECOLOGY  
GRAND ROUNDS, (CONT.)**

<b>Date</b>	<b>Title</b>	<b>Speaker</b>
March 19, 2008	Canceled	
March 26, 2008	"Radiation Oncology in Gynecologic Malignancies"	Heath Mackley, MD Assistant Professor of Radiology, Penn State Milton S. Hershey Medical Center
April 2, 2008	M & M Conference	
April 9, 2008	"Soy and other Phytochemicals in Preventing Cancer"	Karen Friedman-Kester Instructor Harrisburg Area Community College
April 16, 2008	"Resident Research Projects" (Part I)	Simone Piraino, MD Amber O'Leary, MD Kerri Wenzel, MD Michele Martins, MD Amanda Wait, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
April 23, 2008	"Resident Research Projects" (Part II)	Simone Piraino, MD Amber O'Leary, MD Kerri Wenzel, MD Michele Martins, MD Amanda Wait, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
April 30, 2008	"The Role of Body Weight and Physical Nutrition Development of Bone Strength in Adolescent Women"	Thomas Lloyd, MD Professor of Clinical Epidemiology, Departments of Health Evaluation Sciences, Obstetrics and Gynecology, Pharmacology and Nutrition Penn State Milton S. Hershey Medical Center
May 7, 2008	M & M Conference	
May 14, 2008	Canceled	

**2007 – 2008 OBSTETRICS AND GYNECOLOGY  
GRAND ROUNDS, (CONT.)**

Date	Title	Speaker
May 21, 2008	Canceled	
May 28, 2008	"Web Based Education"	Andreas Meier, MD Assistant Professor of Surgery and Pediatrics Penn State Milton S. Hershey Medical Center
June 4, 2008	M & M Conference	Thanh Truong, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center
June 11, 2008	"Management of Obesity and Pregnancy: Evidence Based Obstetrics "	Raul Artal, MD Professor and Chair, Ob/Gyn St. Louis University
June 18, 2008	Resident Research Project	Michele Martins, MD Department of Obstetrics and Gynecology Penn State Milton S. Hershey Medical Center

## RESEARCH SUPPORT

### **John J. Botti, M.D.**

Penn State Women's Health & The Isabel Cate Rineer  
Memorial Endowment in Perinatology  
Administrator  
Principal Balance \$13,186

Pennsylvania Department of Health  
Central PA Center of Excellence for Research on  
Pregnancy Outcomes  
Co-Investigator  
\$17,570

### **Carie D'Agata, M.D.**

Association of Faculty and Friends  
Young Mothers program  
\$3000

### **William Dodson, M.D.**

National Institutes of Health  
RFA-HD-02-012  
The Meharry Medical College/Penn State Cooperative  
Reproductive Science Center  
(P.I. Project II- The effects of oral contraceptives on  
Uterine Leiomyoma)  
\$24,027

### **Edward Podczaski, M.D.**

Gynecologic Oncology Group parent member.  
West Virginia University, University of Maryland, and  
Lehigh Valley affiliate members of Hershey Medical  
Center.  
\$427,020

### **Marianne M. Hillemeier, Ph.D., M.P.H.**

Penn State CTSA seed grant, "Central Pennsylvania  
Women's Health Study (CePAWHS): Extending the Strong  
Healthy Women Behavior Change Intervention to Urban  
Areas," Co-Investigator, (PI C Weisman), 2008-2009  
\$74,996



R01 funded by the National Institute of Child Health and Human Development "Mode of First Delivery and Subsequent Childbearing", Co-Investigator, (PI K Kjerulff), 2008-2013  
\$4,600,000

Pennsylvania Department of Public Health. "Central Pennsylvania Center of Excellence for Research on Pregnancy Outcomes," Co-Principal Investigator and Director of Research Core, (PI C Weisman), 2004-2008  
\$4,700,000

**Richard S. Legro, M.D.**

National Institutes of Health  
1R01HD056510  
Legro, RS  
Treatment of Insulin Resistance vs. Hyperandrogenism in Infertile PCOS Women

National Institutes of Health  
2 U54 HD034449-11A2 (Through VCU with Nestler JE overall PI)  
Legro, RS (Key Investigator for Project I in the U54 grant)  
Hyperandrogenism and Insulin Resistance in the Ontogeny of PCOS

Commonwealth of Pennsylvania  
SAP 41-000-26343  
Legro RS  
Translational Research in Polycystic ovary syndrome  
2%  
38,490  
01/01/08-12/31/08

National Institutes of Health  
U10 HD 38992  
Legro, RS  
Cooperative Multicenter Reproductive Medicine Network

National Institutes of Health -Fogarty  
1 RO3 TW007438-01  
Legro RS  
The treatment of dysmenorrhea: Effects of sildenafil

National Institutes of Health  
U54 HD044315  
Coney, PJ  
The Meharry Medical College/Penn State Cooperative  
Reproductive Science Center  
5% (Co-Director of the Center)  
5% (P.I. Project III- A Randomized trial of metformin and  
lifestyle interventions in adolescents and adult women with  
PCOS)  
5,446,268 (Penn State Direct Costs 1,250,000)

CROWN, Lancaster PA  
None  
Legro RS  
Continuous Glucose Monitoring in Pregnant Women with  
Polycystic ovary syndrome: A case control study  
1%  
30,316  
05/01/05-04/30/08

CROWN, Lancaster PA  
Legro RS  
Development of a Screening Test for Endometrial  
Hyperplasia in a At Risk Population  
50,000  
10/01/05-9/30/08

Commonwealth of Pennsylvania  
SAP 41-000-26343  
Legro RS  
Planning Grant for an Obesity and Reproduction Center  
5%  
402,000  
01/01/05-12/31/08

National Institutes of Health  
2R01-HD33852  
McAllister JM (PI), Legro, RS (Co-Investigator)  
17a-Hydroxylase expression in human ovarian cells.  
3%  
1,496,218  
12/31/05-11/30/09

National Institutes of Health  
RO1-HD53000  
McAllister JM (PI), Legro, RS (Co-Investigator)  
Mechanism of Metformin Action  
3%  
1,005,000  
6/01/08-5/31/13

**Colin MacNeill, M.D.**

Pennsylvania Tobacco Settlement Fund  
SP-A and SP-D Genetic Variants Associated with Preterm  
Birth  
Principal Investigator  
\$346,700

Pennsylvania Department of Health  
Central PA Center of Excellence for Research on  
Pregnancy Outcomes  
Co-Investigator  
\$16,560

**John T. Repke, M.D., F.A.C.O.G.**

NIH – RO1 HD052990  
Mode of First Delivery and Subsequent Child-Bearing  
Co-Investigator, (PI: Kristen Kjerulff, PhD)  
05/01/08-04/30/13  
\$488,288.00, annually

**Carol Weisman, Ph.D.**

Pennsylvania Department of Health  
Central PA Center of Excellence for Research on  
Pregnancy Outcomes  
Principal Investigator  
\$4,700,000

National Committee for Quality Assurance  
Improving the Quality of Care for Cardiovascular Disease:  
Using National Managed Care Performance Data to  
Investigate Gender Differences in HEDIS Measures  
Related to Heart Disease.  
Co-investigator

US Department of Veterans Affairs  
Impact of Practice Structure on the Quality of Care for  
Women Veterans  
Co-investigator

**Judith Weisz, M.B., B. Chir.**

PA Tobacco Settlement Fund  
Retinoid Homeostasis, Oxidative Stress and Breast  
Carcinogenesis  
\$112,684

Department of Defense  
Lipid Peroxidation  
Principal Investigator  
\$109,875

Pennsylvania Department of Health  
Central PA Center of Excellence for Research on  
Pregnancy Outcomes  
Co-Investigator  
\$923