Department of Obstetrics,
Gynecology and Reproductive Medicine

THIRTY FIRST ANNUAL RESIDENTS & FELLOWS RESEARCH DAY

June 15, 2011

STATE UNIVERSITY OF NEW YORK
STONY BROOK
HEALTH SCIENCES CENTER

Stony Brook University Medical Center
Stony Brook, New York

PROGRAM OBJECTIVES

The purpose of this program is to provide a forum for discussion of original research findings and for the introduction, development, and review of new and most accepted approaches to the discipline of Obstetrics and Gynecology. Upon completion of the program, participants should be able to apply medical problem-solving skills, practice new approaches to manual and surgical skills, and utilize skills in evaluating new information.

CERTIFICATION STATEMENT

The School of Medicine, State University of New York at Stony Brook, is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The School of Medicine, State University of New York at Stony Brook, designates this activity for a maximum of 5.5 AMA PRA Category 1™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The American College of Obstetricians and Gynecologists has assigned 6 cognate credits to this program.

DISCLOSURE POLICY

All those in control of CME content are expected to disclose any relevant financial relationship with the provider of commercial products or services discussed in the educational presentation or that have directly supported the CME activity through an educational grant to the sponsoring organization(s).

All commercial relationships that create a conflict with the planners, speakers, and authors control of content must be resolved before the educational activity occurs.

ALUMNI RESIDENTS (CONTINUED)

2002-2003
Karen Chu, MD, Private Practice, San Francisco, California
JoAnna Paolilli, MD, Private Practice, Mineola, New York
Hera Sambaziotis, MD, MPH, Albert Einstein Medical Center, Bronx, New York
Julie Welischar, MD, Private Practice, Setauket, New York

2003-2004
Patricia Ardise, MD, Private Practice, New Jersey
Anne Hunter, MD
Sara Petruska, MD, Private Practice, Kentucky
Alejandra Turmero, MD, Private Practice, Rhode Island

2004-2005
Heather McGehean, MD
Timothy Hale, MD, Private Practice, Massachusetts
Joyce Rubin, MD, Private Practice, Smithtown, New York
Vanessa Soviero, MD, Private Practice, Smithtown, New York
Eva Swoboda, MD, Stony Brook University Medical Center, Stony Brook, New York

2005-2006
Lynda Gioia, MD, Private Practice, Tennessee
Olga Glushets, MD, Urogynecology
Meredith McDowell, MD, Private Practice, Norwich, New York

2006-2007
Patricia Dramitinos, MD, Urogynecology
Megan Lochner, MD, Private Practice, Setauket
Christopher Paoloni, MD, Private Practice, Virginia
Anita Patibandla, MD, Private Practice, Ohio

2007-2008
Rupinder Bhangoo, MD, Private Practice, Fishkill, New York
Kristen Patzkowsky, MD, Minimally Invasive Fellowship, Ann Arbor, Michigan
Kelly van den Huevel, MD, Private Practice, San Diego, California
Dympna Weil, MD, Private Practice

2008-2009
Kirthi Katkuri, MD, St. Elizabeth's Medical Center, MA
Nikole Ostrov, MD , Minimally Invasive Surgery
Erin Stevens, MD, Gynecologic Oncology Fellowship, SUNY Downstate, Brooklyn NY

2009-2010
Jerasimos Ballas, MD, Maternal Fetal Medicine Fellowship, San Diego, CA
Shelly-Ann James, MD, Mary Washington Hospital, Virginia
Lan Na Lee, MD, Minimally Invasive Surgery Fellowship, Stony Brook University Medical Center
Randi Turkewitz, MD, Private Practice, Pennsylvania

ALUMNI RESIDENTS (CONTINUED)

1993-1994
Ira Chan, MD, Instructor, Beth Israel Hospital, Harvard Medical School, Boston, MA
Pui Chun Cheng, MD, Gynecologic Oncology, New Orleans, Louisiana
Lawrence Weinstein, MD, Private Practice, Kingston, New York

1994-1995
Ira Bachman, MD, Private Practice, Cedarhurst, New York
Petra Belady, MD, Private Practice, Bloomington, Indiana
Gloria Escamilla, MD, Private Practice, Smithtown, New York
Lisa Farkouh, MD, Private Practice, Denver, Colorado

1995-1996
Felicia Callan, MD, Private Practice, Huntington, New York
Charles Mirabile, MD, Private Practice, West Islip, New York
Karen Morris, MD, Private Practice, Huntington, New York
James Stelling, MD, Private Practice, Stony Brook, New York

1996-1997
Jacqueline Ammirata, MD, Private Practice, West Islip, New York
Todd Griffin, MD, Chief Medical Officer, Stony Brook University Hospital, Stony Brook, New York
Hitesh Narain, MD, Private Practice, Patchogue, New York
Florence Rolston, MD, Private Practice, Southampton, New York

1997-1998
Salil Bakshi, MD, Private Practice, Oakdale, New York
Wei Chu, MD, Private Practice, East Islip, New York
David Reavis, MD, Private Practice, Patchogue, New York
Marian Zinnante, MD, Private Practice, Arlington, Texas

1998-1999
Robert Duck, MD, Private Practice, Winchester, Virginia
Christopher Fabricant, MD, Univ. of Texas, Southwestern Medical Center, Dallas, Texas
Anne Hardart, MD, University of Southern California, Los Angeles, California
Lynne Macco, MD, Private Practice, West Islip, New York

1999-2000
Vito Alamia, MD, Private Practice, Southampton, New York
Terry Allen, MD, Private Practice, Fairfax, Virginia
Mari Inagami, MD, Private Practice, Westport, Connecticut
Jill Thompson, MD, Private Practice, Northport, New York

2000-2001
Martina Frandina, MD, New York Downtown Hospital, New York, New York
Dennis McGroary, MD Private Practice, Mt. Kisco, New York
Antonia Pinney, MD, Private Practice, New Jersey

2001-2002
Siobhan Hayden, MD, Mary Imogene Barrett Hospital, Cooperstown, New York
Antoun Khabbaz, MD, Appalachian Regional Healthcare, Harlan, Kentucky
Dennis Strittmatter, MD, Private Practice, Port Jefferson, New York

Department of Obstetrics, Gynecology and Reproductive Medicine
School of Medicine
Stony Brook University Medical Center
Thirty First Annual Residents and Fellows Research Day
June 15, 2011

Chairman: J. Gerald Quirk, MD, PhD

Residency Director: Michael Lydic, MD

RRD Program Director: Richard Bronson, MD

RRD Program Committee: Deborah Duttge
Darlene Swords
Terry Leonbruno
Catherine Connelly

Departmental Faculty:

Kristen Alarcon, NP
Susan Altman, CNM, DNP
Cecilia Avila, MD
David Baker, MD
Richard Bronson, MD
Lauri Budnick, MD
Christine Conway, MD
James Droesch, MD
Reinaldo Figueroa, MD
Heather Findletar, CNM, DNP
Maria Fisher, CNM
Marie Frey, CNM
Jennifer Griffin, NP
Todd Griffin, MD
Rosemary Griffith, NP
Jessica Hilsenroth, CNM
Jennifer Johnson, MD
Pamela Koch, CNM
Christina Kocis, CNM, DNP
Laura Lesch, NP
Michael Lydic, MD
Goldie McBride, CM
Careen Mauro, CNM
Alan Monheit, MD
Paul L. Ogburn, Jr., MD
Michael Pearl, MD
Lisa Rimpel, MD
Carrie Semelsberger, NP
Natalie Semenyuk, MD
Melissa Strafford, MD
Eva Swoboda, MD
Siamak Tabibzadeh, MD
Ann Visser, CNM

Martin L. Stone, MD
Professor Emeritus

Linda Tseng, PhD
Professor Emeritus

LECTURERS AND JUDGES

THIRTY FIRST ANNUAL RESIDENTS & FELLOWS RESEARCH DAY

MARTIN L. STONE, MD VISITING LECTURER AND JUDGE

Allan J. Jacobs, MD	Professor and Chair Department of Obstetrics & Gynecology Flushing Hospital Medical Center

JUDGES

Kenneth Rosenfeld, MD	President of University Hospital Medical Board Clinical Associate Professor Department of Anesthesiology Stony Brook University Medical Center
Christian Westermann, MD	Clinical Assistant Professor Department of Ob/Gyn Stony Brook University Medical Center

RESIDENTS

CHIEFS	Elizabeth Buescher, MD
Administrative Chief	Joseph Chappelle, MD
Administrative Chief	Elizabeth Garduno, MD, MPH
	Donald Phillibert, MD
	Chanda Reese, MD
PGY-3	Leia L. Card, MD
	Diana J. Garretto, MD
	James A. MacDonald, MD
	Cara S. Ninivaggio, MD
	Viveka R. Prakash, MD
PGY-2	Rosalie O. Alvarado, MD
	Jenny A. Blumberg, MD
	Jennifer Conway, MD
	Amanika Kumar, MD
	Michael J. Vizcarra, MD
PGY-1	Fabiola Balmir, MD
	Daniela Carlos Pons, MD
	Deepti Nahar, MD
	Jane So, MD
	Melanie Van Sise, MD

FELLOWS

Maternal Fetal Medicine	M. Baraa Allaf, MD	1st Year
	Michael Demishev, MD	2nd Year
	Jolene Muscat, MD	3rd Year
Minimally Invasive Surgery	Lan Na Lee, MD	

ALUMNI RESIDENTS

1981-1982
Richard Scotti, MD, Deceased
W. Robert Lockridge, MD, New York

1982-1983
Deborah Davenport, MD, Private Practice, East Setauket, New York
William Shuell, MD, Private Practice, Southampton, New York

1983-1984
Robert O'Keefe, MD, Private Practice, Setauket, New York
Alexandra Taylor, MD

1984-1985
Eva Chalas, MD, Vice Chair of Ob/Gyn, Winthrop University Hospital, Mineola, New York
David Kreiner, MD, Private Practice, Woodbury, New York

1985-1986
Jeffrey Porte, MD, Private Practice, Setauket, New York
Gae Rodke, MD, Private Practice, New York, New York

1986-1987
Lance Edwards, MD, Private Practice, Port Jefferson, New York
Mindy Shaffran, MD, Private Practice, Port Jefferson, New York
Christian Westermann, MD, Private Practice, Stony Brook, New York

1987-1988
Timothy Bonney, MD, Private Practice, West Islip, New York
Arlene Kaelber, MD, Private Practice, East Setauket, New York

1988-1989
Michael Arato, MD, Private Practice, Stony Brook, New York
Miriam Sivkin, MD, Private Practice, Milford, Connecticut

1989-1990
Michael Klotz, MD, Private Practice, Seattle, Washington
Paul Meyers, MD, Riverside Hospital, Newport News, Virginia
Gustavo San Roman, MD, Private Practice, Port Jefferson Station, New York

1990-1991
Cheri Coyle, MD, Private Practice, Hampton, Virginia
Syau-fu Ma, MD, Private Practice, Ridgewood, New Jersey
John Wagner, MD, Private Practice, East Northport, New York

1991-1992
Brian McKenna, MD, Private Practice, Smithtown, New York
Gerald Siegel, MD, Private Practice, Commack, New York
Marie Welshinger, MD, Women's Cancer Center, Morristown Memorial, Morristown, New Jersey

1992-1993
Theodore Goldman, MD, Private Practice, East Northport, New York
Stephanie Mann, MD, Private Practice, Los Angeles, California
Robert Scanlon, MD, Private Practice, Kingston, New York

AWARDS—PAST RECIPIENTS

The Golden Scalpel Award

In Recognition of Demonstrating Excellence in Technical Skills

2001	Martina Frandina, MD
2002	Antoun Khabbaz, M.D
2003	Julie Welischar, MD
2004	Joyce Rubin, MD
2005	Eva Swoboda, MD
2006	Megan Lochner, MD
2007	Megan Lochner, MD
2008	Nikole Ostrov, MD
2009	Nikole Ostrov, MD
2010	Randi Turkewitz, MD

PROGRAM

8:30 - 8:35 *Welcome*
J. Gerald Quirk, MD, PhD
Chairman

8:35 – 8:45 *Introduction*
Richard Bronson, MD
Residents & Fellows Research Day Program Director

8:45 – 8:55 *Effect of Preincisional Local Analgesia on Post-Operative Pain in 10-12mm Lateral Port Sites*
Rosalie Alvarado, MD
Faculty Advisors: James Droesch, MD
Lan Na Lee, MD

8:55 – 9:00 Open Discussion

9:00 – 9:15 *Preterm Premature Rupture of Membranes: Neonatal Outcomes at 32 to 36 Weeks Gestation*
Viveka Prakash, MD
Faculty Advisor : Reinaldo Figueroa, MD

9:15 – 9:30 Discussion and Questions
Discussant: Christine Conway, MD

9:30 – 9:40 *The Perineal Simulator: A Novel Way to Improve Resident Understanding of Perineal Anatomy and Obstetric Laceration Repair*
Jennifer Conway, MD
Faculty Advisors: Lauri Budnick, MD
Eva Swoboda, MD

9:40 – 9:45 Open Discussion

9:45 – 10:00 *Chorioamnionitis: A Retrospective Study Analyzing the Accuracy of the Clinical Diagnosis in Preterm Pregnancies*
Leia Card, MD
Faculty Advisor: Reinaldo Figueroa, MD

10:00 – 10:15 Discussion and Questions
Discussant: Cecilia Avila, MD

10:15 – 10:45 Coffee Break

10:45 – 10:55 *Cervidil and Induction of Labor: Do Two Cervidils Make a Difference?*
Jennifer Blumberg, MD
Faculty Advisors: Paul L. Ogburn, MD
Erin Stevens, MD

PROGRAM (CONTINUED)

10:55 – 11:00 Open Discussion

11:00 – 11:15 *Mini Laparotomy Versus Laparoscopy for Gynecologic Conditions*
Amanika Kumar, MD
Faculty Advisor: Michael Pearl, MD

11:15 – 11:20 Open Discussion

11:20 – 11:35 *Intra and Inter-observer Variability in Evaluation of First Trimester Placental Volume Obtained by Three Dimensional Sonography*
Jolene Muscat, MD
Faculty Advisors: Martin Chavez, MD
Paul L. Ogburn, MD

11:35 – 11:50 Discussion and Questions
Discussant: Reinaldo Figueroa, MD

11:50 – 12:50 *The Interaction Between Medical Ethics and Law*
Allan J. Jacobs, MD

12:50 – 1:50 Lunch

1:50 – 2:05 *Maternal Characteristics Associated with Readmission for Postpartum Preeclampsia*
Michael Demishev, MD
Faculty Advisor: Anthony Vintzileos, MD

2:05 – 2:20 Discussion and Questions
Discussant: Paul L. Ogburn, MD

2:20 – 2:30 *MRI Versus Ultrasound in the Diagnosis of Placenta Accreta: A Retrospective Analysis*
Michael Vizcarra, MD
Faculty Advisor: Nancy Budorick, MD

2:30– 2:35 Open Discussion

2:35 – 2:50 *The Relationship of Bleeding Profiles to Endometrial Pathology in the Premenopausal Population: A Retrospective Study*
Cara Ninivaggio, MD
Faculty Advisor: Eva Swoboda, MD

2:50 – 3:05 Discussion and Questions
Discussant: James Droesch, MD

AWARDS—PAST RECIPIENTS

The William J. Mann, MD Pathology Award

1982	Deborah Davenport, MD	**1997**	Todd Griffin, MD
1983	Deborah Davenport, MD	**1998**	Robert Duck, MD
1984	Eva Chalas, MD	**1999**	Jill Thompson, MD
1985	Eva Chalas, MD	**2000**	Jill Thompson, MD
1986	Mindy Shaffran, MD		Terry Allen, MD
1987	Christian Westermann, MD	**2001**	Hera Sambaziotis, MD, MPH
1988	Michael Arato, MD	**2002**	JoAnna Paolilli, MD
1989	Paul Meyers, MD	**2003**	Timothy Hale, MD
1990	Syau-fu Ma, MD	**2004**	Vanessa Soviero, MD
1991	Cheri Coyle, MD	**2005**	Megan Lochner, MD
1992	Robert Scanlon, MD	**2006**	Olga Glushets, MD
1993	Robert Scanlon, MD	**2007**	Patricia Dramitinos, MD
1994	Petra Belady, MD	**2008**	Kelly van den Heuvel, MD
1995	Charles Mirabile, MD	**2009**	Erin Stevens, MD
1996	James Stelling, MD	**2010**	Alexis Gimovsky, MD

The Robert L. Barbieri MD Research Award
(Formerly the Resident Research Award)

1981	Deborah Davenport, MD	**1997**	Anne Hardart, MD
1982	Alexandra Taylor, MD		Marian Zinnante, MD
1983	Deborah Davenport, MD	**1998**	Anne Hardart, MD
1984	Robert O'Keefe, MD		Jill Thompson, MD
1985	Gae Rodke, MD	**1999**	Vito Alamia, MD
1986	Christian Westermann, MD	**2000**	Mari Inagami, MD
1987	Mindy Shaffran, MD	**2001**	Dennis Strittmatter, MD
1988	Michael Arato, MD	**2002**	JoAnna Paolilli, MD
1989	Syau-fu Ma, MD	**2003**	Sara Petruska, MD
1990	John Wagner, MD	**2004**	Anne Hunter, MD
1991	John Wagner, MD	**2005**	Lynda Gioia, MD
1992	Robert Scanlon, MD	**2006**	Kristin Patkowsky, MD
1993	Robert Scanlon, MD	**2007**	Kelly van den Heuvel, MD
1994	Ira Bachman, MD	**2008**	Nikole Ostrov, M.D
1995	Felicia Callan, MD	**2009**	Elizabeth Buescher, MD
1996	Todd Griffin, MD	**2010**	Elizabeth Garduno, MD, MPH
	Marian Zinnante, MD		

AWARDS—PAST RECIPIENTS

The David Marzouk, MD Humanism in Medicine Award

In Recognition of Warmth, Compassion, and Devotion to the Profession of Medicine

1985	Eva Chalas, MD
1986	Timothy Bonney, MD
1987	Michael Arato, MD
1988	Michael Arato, MD
1989	Syau-fu Ma, MD
1990	Brian McKenna, MD
1991	Robert Scanlon, MD
1992	Stephanie Mann, MD
1993	Petra Belady, MD
1994	Felicia Callan, MD
1995	Elizabeth Folland, MD
1996	Florence Rolston, MD
1997	David Reavis, MD
1998	Vito Alamia, MD
1999	Lynne Macco, MD
2000	Siobhan Hayden, MD
2001	Anne Hunter, MD
2002	JoAnna Paolilli, MD
2003	Sara Petruska, MD
2004	Vanessa Soviero, MD
2005	Megan Lochner, MD
2006	Meredith McDowell, MD
2007	Dympna Weil, MD
2008	Rupinder Bhangoo, MD
2009	Nikole A. Ostrov, MD
2010	Shelly-Ann James, MD

Resident Teaching Award

In Recognition of Commitment, Dedication, and Enthusiasm in the Teaching and Nurturing of Medical Students

1990	Brian McKenna, MD John Wagner, MD
1991	Pui Chun Cheng, MD
1992	Pui Chun Cheng, MD
1993	Lawrence Weinstein, MD
1994	Todd Griffin, MD
1995	David Reavis, MD
1996	David Reavis, MD
1997	David Reavis, MD
1998	David Reavis, MD
1999	Vito Alamia, MD
2000	JoAnna Paolilli, MD
2001	JoAnna Paolilli, MD Hera Sambaziotis, MD
2002	Joyce Rubin, MD
2003	JoAnna Paolilli, MD
2004	Heather McGehean, MD
2005	Anita Patibandla, MD
2006	Anita Patibandla, MD
2007	Anita Patibandla, MD
2008	Jerasimos Ballas, MD
2009	Nikole A. Ostrov, M.D
2010	Diana Garretto, MD

PROGRAM (CONTINUED)

3:05 – 3:20	*Use of Body Mass Index in Pregnancy* **Diana Garretto, MD** Faculty Advisor: Erin Stevens, MD
3:20 – 3:35	Discussion and Questions **Discussant: Jennifer Johnson, MD**
3:35– 3:50	*Can Epidural Analgesia Effectively Continue the Gestation in Preterm Labor?* **James MacDonald, MD** Faculty Advisors: Rishimani Adsumelli, MD Reinaldo Figueroa, MD
3:50 – 4:05	Discussion and Questions **Discussant: J. Gerald Quirk, MD, PhD**

Effect of Preincisional Local Analgesia on Post-Operative Pain in 10-12mm Lateral Port Sites

Rosalie Alvarado, MD, James Droesch, MD and Lan Na Lee, MD

Introduction: Advances through the past 35 years have spurred the growth of gynecologic minimally invasive procedures. Advantages of minimally invasive procedures include shorter hospital time and shorter recovery time. As this procedure has been increasingly utilized for gynecology, the identification of strategies to further increase patient satisfaction is of great interest. One of the barriers to early return to functionality is the postoperative pain perceived at larger lateral port sites.

Objective: To demonstrate that pre-incisional administration of local analgesia in the 10-12 mm lateral abdominal wall port site favorably affects postopt pain scores in laparoscopic and robotic procedures.

Hypothesis: The hypothesis is that patients receiving injection of 0.25% Marcaine in the lateral 10-12 mm port siter prior to skin incision will report significantly less postoperative pain than control patients.

Methods: A prospective study will be conducted to enroll patients who are undergoing elective laparoscopic or robotic hysterectomies or myomectomies. Inclusion criteria are patients undergoing non-emergent, elective hysterectomies or myomectomies where a 10-12mm lateral port site is placed. Exclusion criteria are patients with procedures requiring conversion to laparotomy and procedures with unintended outcomes including injury to surrounding nerves, blood vessels and organs and excessive blood loss requiring blood transfusions.

Once patients are selected and consented for the study, they will be randomized into a control group and study group. The study group will receive 0.25% Marcaine to infiltrate the surgical area of the lateral port site prior to skin incision. The control group will receive Normal Saline to infiltrate the surgical area prior to skin incision.

The patients will be monitored post-operatively via questionnaire to rate their pain on an integer scale (1-10) at hours 2, 6, 12 and 24 hours post-operation. The medication administration record of each patient will be examined closely to determine their pain medication requirements. The patients will be interviewed via telephone call approximately one week after their operation to assess their level of pain.

Results and Conclusions: Pending

The Martin L. Stone, MD Award

The Outstanding Resident in Recognition of Dedication, Commitment, and Service
(Formerly Resident of the Year Award)

1982	Robert O'Keefe, MD
1983	Eva Chalas, MD
1984	Jeffrey Porte, MD
1985	Eva Chalas, MD
1986	Jeffrey Porte, MD
1987	Christian Westermann, MD
1988	Timothy Bonney, MD
1989	Michael Arato, MD
1990	Marie Welshinger, MD
1991	John Wagner, MD
1992	Pui Chun Cheng, MD
1993	Lawrence Weinstein, MD
1994	Ira Bachman, MD
1995	Ira Bachman, MD
1996	James Stelling, MD
1997	Todd Griffin, MD
1998	David Reavis, MD
1999	Lynn Macco, MD
2000	Siobhan Hayden, MD
2001	Martina Frandina, MD
2002	Siobhan Hayden, MD
2003	JoAnna Paolilli, MD
2004	Patricia Ardise, MD
2005	Heather McGehean, MD
2006	Lynda Gioia, MD
2007	Megan Lochner, MD
2008	Dympna Weil, MD
2009	Erin Stevens, MD
2010	Randi Turkewitz, MD

The Voluntary Clinical Faculty Award

In Recognition of and Appreciation for Outstanding Teaching and Service to the Residency Program

1995	Richard Halpert, MD
1996	Christian Westermann, MD
1997	James Droesch, MD
1998	Deborah Davenport, MD
1999	Christian Westermann, MD
2000	Abraham Halfen, MD
2001	Abraham, Halfen, MD
2002	Todd Griffin, MD
2003	Philip Schoenfeld, MD
2004	James Stelling, MD
2005	James Droesch, MD
2006	James Droesch, MD
2007	Jeffrey Porte, MD
2008	James Droesch, MD
2009	James Stelling, MD
2010	David Reavis, MD

APPENDIX

PAST AWARD WINNERS

AND

ALUMNI

Preterm Premature Rupture of Membranes: Neonatal Outcomes at 32 to 36 Weeks Gestation

Viveka R. Prakash, MD and Reinaldo Figueroa, MD

Objective: To determine which antepartum management approaches for PPROM at 32 to 36 weeks gestation are associated with an outcome of neonatal morbidity, particulary respiratory morbidity.

Methods: In this retrospective cohort study, we reviewed characteristics of women admitted to Stony Brook University Hospital with the diagnosis of preterm premature rupture of membranes (PPROM) between 32 and 0/7 weeks and 36 and 6/7 weeks from January 2006 to December 2009. Details of management such as use of antibiotics and use of tocolytics and subsequent neonatal outcomes were reviewed. Of particular interest were rates of neonatal morbidity related to respiratory function, i.e. respiratory distress syndrome (RDS) and apnea.

Results: Of the 694 women admitted to Stony Brook University Hospital with PPROM from January 2006 to December 2009, there were 30 cases that met inclusion criteria. There were no cases of neonatal death. Of the 30 eligible maternal subjects, 22 delivered within 24 hours of PPROM (73.4%). Of the total, 24 received one or more doses of IV antibiotics prior to delivery (80%) and 5 received one or more tocolytic agent (16.7%). Of the 30 eligible neonatal subjects, 24 were admitted to the neonatal ICU (80%). Of these 24 neonates, 4 (16.7%) were born to women who did not receive antibiotics following PPROM. The 6 neonates not requiring ICU admission were 36 weeks gestation or more at the time of PPROM (20%). Of the ICU admissions, 23 of 24 (95.8%) underwent workup for suspected sepsis; however none were diagnosed with sepsis. There were 15 of the total 30 neonates (50%) requiring intervention for apnea immediately after delivery. However, only 1 neonate (3.3% of total) was diagnosed with RDS. Further statistical analysis is in process.

Conclusion: In the population of neonates delivered following PPROM between 32 and 36 weeks gestation, there is still a risk for respiratory compromise. However, the risk of RDS may be decreased as compared to neonates born following PPROM earlier than 32 weeks gestation. There remains a high rate of ICU admission, primarily for suspected sepsis, although there may be a very low rate of diagnosed sepsis in these infants possibly due to the widespread use of antibiotics after PPROM. While controversy still exists regarding the management of PPROM after 32 weeks gestation, the low rates of significant neonatal morbidity may guide future practice towards minimal interventions for these women and their infants.

The Perineal Simulator: A Novel Way to Improve Resident Understanding of Perineal Anatomy and Obstetric Laceration Repair

Jennifer Conway, MD, Lauri Budnick, MD and Eva Swoboda, MD

Background: At the completion of their training, ob-gyn residents are expected to understand female perineal anatomy. Without difficulty they should be able to diagnose and repair obstetric lacerations of any degree. However, the majority of ob-gyn residents admit to having no formal teaching on pelvic floor anatomy and no didactic sessions dedicated to learning obstetric laceration repair. Historically, education has taken place at the bedside; residents honed their skills by practicing on patients. With the reduction in resident duty hours and case numbers, relying on this type of experience-based training is unsatisfactory to achieve an adequate level of expertise. Therefore, over the course of the past two decades, simulation-based instruction has become an integral component in ob-gyn residency education.

Objective: The Perineal Simulator is an inexpensive, easily constructed 3-D model for teaching perineal anatomy and practicing obstetric laceration repair. The purpose of this study is to evaluate whether the Perineal Simulator is a good educational tool. We will assess residents' ability to identify perineal anatomy, to classify obstetric lacerations, and to perform obstetric laceration repairs following video teaching with the Perineal Simulator. This will be the first step in a multiphase analysis of the educational impact of the Perineal Simulator.

Methods: The Perineal Simulator is quickly and easily constructed using inexpensive craft-store items. A total of 24 ob-gyn residents from the Stony Brook University Hospital will view a brief educational video, which includes instructions for model construction, a review of female perineal anatomy and obstetric lacerations, and a demonstration on how to use the model for practicing laceration repairs. The residents will complete pre- and post-intervention self-assessment questionnaires. As this will be the first investigation of the Perineal Simulator's impact, the decision was made to proceed with an intervention which solely includes the video demonstration of the model. This ensures the teaching residents receive is reproducible thus minimizing confounding variables. Since the video demonstration provides an extremely detailed review of the model and its use, it is considered to be reflective of the model's inherent educational value.

Results: Collection in process.

Conclusion: Pending.

Can Epidural Analgesia Effectively Continue the Gestation in Preterm Labor?

James Macdonald, MD, Rishimani Adsumelli, MD and Reinaldo Figueroa, MD

Background: We observed that epidural analgesia (ED) had effectively stopped preterm labor (PTL) and allowed pregnancy to continue in some cases. The possible mechanisms for inhibitory effect of ED on uterine contractions are alteration of uterine sympathetic and parasympathetic balance and suppression of PGF2 alpha release. Based upon our experience, we believe that ED may be a useful adjuvant to continue the gestation in some parturients. Often ED analgesia is given to these patients for clinically indicated reasons such as moderate to severe labor pain, preparation for delivery. However, there are no prior studies that have looked at the role of ED in arresting the preterm labor.

Objective: 1. To evaluate the effect of ED analgesia in conjunction with the standard tocolytic therapy to effectively continue the gestation in PTL.
2. Evaluate the effects of an ED on contractions in PTL.

Study Design: Pilot study with retrospective analysis of the Data of patients admitted to Stony Brook University Hospital in the year 2008. Each patient was diagnosed with preterm labor through cervical change amidst painful contractions, and had documented cervical exams and tocometer tracings. Regression analysis was used to assess the impact of factors such as, tocolytic therapy, rupture of membranes, gestational age, ED, which could prolong the gestation. Contraction frequency before and after ED were assessed with both paired t-test and sign rank test.

Results: 67 episodes of PTL were included. 34 received ED for clinical indications. Preliminary analysis showed that ED was not found to be significant in prolonging the gestation. Contraction frequency after ED decreased significantly in the patients where in tocolytic medication was also used.

Conclusion: Our preliminary analysis showed that ED when used in conjunction with tocolytic agents decreased the number of uterine contractions. We could not demonstrate that it was a significant factor in prolonging the gestation in this small sample of patients.

Use of Body Mass Index in Pregnancy

Diana Garretto, MD and Erin E. Stevens, MD

Objective: In the United States, we are currently in the midst of an obesity epidemic. In 2007-2008, the prevalence of obesity was 35.5% among adult young women. This has led to many complications with pregnancy including macrosomia, increased blood loss, and increased risk of caesarian delivery. Recently, the Institute of Medicine has revised the amount of appropriate weight gain in pregnancy based on a person's pre-pregnancy BMI. What has not been published is what the appropriate BMI is at the time of delivery for these women. Also not yet investigated are if increases in BMI above the recommendations result in the same adverse outcomes. We are examining the relationship of pre-pregnancy BMI to delivery BMI to see if the complications associated with obesity are also associated with those women who have inappropriate changes in their BMI during pregnancy. The goal of our project, therefore, is twofold- define what the appropriate delivery BMI is, as well as the appropriate changes during pregnancy. Investigate the complications including macrosomia, blood loss, operative delivery, lacerations, and preeclampsia based on pre-pregnancy as well as delivery BMI to see if there is an association.

Materials and Methods: This is a retrospective chart review. Variables such as age, gravidy, parity, gestational age at delivery, height, pre-pregnancy weight, pre-pregnancy BMI, delivery weight, delivery BMI, neonate weight, type of delivery, degree of laceration, presence/absence of diabetes, estimated blood loss at delivery, and presence of preeclampsia. The subjects are patients who delivered at Stony Brook University Medical Center from January 2009 through July 2010. Data will be obtained from the medical record through a retrospective chart review. Subjects who do not have all data points available will be excluded. The IOM recommends a 28-40lb weight gain for underweight pregnant patients, a 25-35 lb gain for normal weight, 15-25 lb gain for overweight and a 11-20 lb gain for overweight. In non-pregnant populations, underweight is a BMI < 18.5, normal weight is a BMI 18.5-24.9, overweight is a BMI 25-29.9 and obese is a BMI > 30. The BMI at term was calculated based on the weight gain recommendations for underweight, normal weight, overweight and obese patients. BMI is calculated using the formula BMI = kg/m^2. The BMI calculator at the NIH website was used to perform the calculations. Heights of 5'0", 5'5" and 5'10" were used as representative heights. Individuals at 5' were assigned the lower limit of the weight gain and 5'10" the upper limit.

Results: 1031 complete patient data points were analyzed. The average age was 28.9; average gestational weeks 39.1; average pre-pregnancy BMI 25.9; average delivery BMI 31.4. Pre-pregnancy weights noted 49.56% of the patients were normal weight at delivery, but 47.8% were either overweight or obese. Furthermore, at term, 43.35% of patients were normal weight and 52.85% of patients were either overweight or obese. Interesting results included that 34% of patients overweight prepregnancy were actually obese at term. Also, 89.54% of those obese prepregnancy were also obese at term. All of the patients starting with a BMI prepregnancy of more than 50 had cesarean sections and 90% of those at term with BMI of more than 50 had a cesarean section. Additional analysis pending.

Conclusion: A standard BMI at term can be easily calculated and applied to obstetric practice. Using the "Term BMI" at the time of delivery may be an easier way to objectively assess risks of obesity at term than weight alone.

Chorioamnionitis: A Retrospective Study Analyzing the Accuracy of Clinical Diagnosis in Preterm Pregnancies

Leia Card, MD and Reinaldo Figueroa, MD

Objective: Twelve percent of all births in the United States are premature, and 10% of these are diagnosed with clinical chorioamnionitis (CCA). CCA is associated with an increased risk of neonatal morbidity and mortality, and it has been defined as maternal fever (>37.8° C) associated with two or more of the following: maternal tachycardia (>100 bpm), fetal tachycardia (>160 bpm), leukocytosis (>15,000/mm^3), uterine tenderness, or malodorous vaginal discharge. Very few studies have examined the accuracy of the above diagnostic criteria in preterm births. The purpose of this study is to investigate the accuracy of the diagnostic criteria of CCA in preterm deliveries and its effect on neonatal outcomes.

Method: A retrospective record review of maternal-infant pairs was conducted on 980 singleton pregnancies delivered between 24 and 36 6/7 weeks gestation at Stony Brook University Medical Center, from January 1, 2005 through December 31, 2008. Fetal deaths and neonates with structural or known chromosomal abnormalities were excluded. Maternal records were reviewed for a diagnosis of CCA and the criteria used to diagnose CCA. These were compared to the standard definition of CCA. Placental pathology reports were reviewed for evidence of histologic chorioamnionitis (HCA). Neonatal records were reviewed for the presence of respiratory distress syndrome, bronchopulmonary dysplasia, necrotizing enterocolitis, intraventricular hemorrhage, periventricular leukomalacia, and mortality. Data was analyzed using the chi-squared test, Fisher's exact, and Student's t-test.

Results: One hundred sixty seven (17%) cases were diagnosed with CCA, while 192 (19.6%) had HCA. One hundred six (63.5%) cases with CCA also had HCA. Thirty (13.9%) cases were diagnosed with CCA using the standard definition. The standard diagnostic criteria were only present in 27 (14%) cases with HCA. Fever (59.4%) was the most common factor found in CCA, followed by maternal tachycardia (45.4%), leukocytosis (44.5%), fetal tachycardia (43.6%), fundal tenderness (13.5%), and malodorous vaginal discharge (3.2%) ($P < 0.001$). With the exception of leukocytosis (46.9%), the other factors were present less commonly in HCA ($p< 0.001$).

Conclusions: The standard definition of CCA was rarely used; yet, HCA was present in 63.5%. The standard criteria used to define CCA should be reevaluated.

Cervidil and Induction of Labor: Do Two Cervidils Make A Difference?

Jenny Blumberg, MD, Paul L. Ogburn, Jr., MD and Erin E. Stevens, MD

Objective: To determine if utilizing two doses of Cervidil increases the rate of successful vaginal delivery.

Background: Induction of labor is one of the most common procedures during pregnancy, accounting for >20% of all births. Common obstetric indications for labor induction include post-term pregnancy, hypertensive disorders, PROM, oligohydramnios, and diabetes, although an increasing number are elective in nature. Induction in the setting of an unfavorable cervix can result in prolonged induction, failed induction, and an increased cesarean delivery rate. The identification of strategies to enhance the success and cost-effectiveness of labor induction is therefore of great interest. This study was designed to determine if utilizing two doses of Cervidil rather than Cervidil followed by alternative methods of induction increases the rate of successful vaginal delivery. A secondary aim of this study is to determine the effect of two doses of Cervidil on the length of the induction process.

Hypothesis: The clinical use of two doses of Cervidil for cervical ripening is associated with a higher rate of cesarean section and longer hospitalization compared with a single dose of Cervidil followed by alternative methods of induction.

Methods: An IRB-approved retrospective cohort study will be conducted examining induction of labor at Stony Brook University Medical Center using Cervidil. Patients will be included in the study if they had an unfavorable Bishops score after the first dose of Cervidil. Exclusion criteria are prior cesarean section or uterine scar, preterm premature rupture of membranes, placenta previa, grand multiparity, or prior attempt at induction during this pregnancy.
Patients who had two doses of Cervidil will be compared with patients who received one Cervidil followed by a different method of induction. Data to be collected include patient age, gravidity and parity, weight and height, gestational age, indication for induction, bishops score, methods of induction, mode of delivery, length of induction, neonatal data, estimated blood loss, and maternal medical history. The primary outcome is the rate of successful vaginal delivery following two Cervidils compared with the rate of vaginal delivery following one Cervidil and another method of induction. Secondary outcomes include duration of induction, neonatal and maternal outcomes.

Results: Data collection ongoing.

The Relationship of Bleeding Profiles to Endometrial Pathology in the Premenopausal Population: A Retrospective Study

Cara S. Ninivaggio, MD and Eva Swoboda, MD

Objective: To investigate endometrial pathology in relationship to the bleeding profiles of premenopausal females undergoing endometrial biopsies.

Null Hypothesis: There will be no correlation between a diagnosis of endometrial pathology and different bleeding profiles.

Background: Endometrial cancer is the most common female genital tract malignancy. The mean age of diagnosis is 61 years, which puts most females with this cancer in the postmenopausal age range. Type I endometrial cancer is the more common form, and its etiology in the majority of cases is an excess of estrogen unopposed by a progestin, which hence, causes endometrial hyperplasia. If allowed to progress, endometrial cancer can result. The epidemiological profile for postmenopausal females at risk for developing type I endometrial cancer is well-defined. Factors influencing risk include: older age, nulliparity, history of infertility, late age of menopause/early age of menarche, obesity, history of diabetes, hypertension, exogenous unopposed estrogen, tamoxifen use, and estrogen-producing tumors.

However, 5-30% of those females who develop endometrial carcinoma are premenopausal. The epidemiologic profile for this younger group at risk for developing endometrial cancer is less well defined. Few studies have been performed correlating risk factors for the premenopausal population. Patient characteristics that have been previously studied to be possible risk factors include nulliparity, obesity, infertility, a history of polycystic ovarian syndrome, and menstrual irregularities. Yet, regarding the menstrual irregularities, no studies characterized the type of irregular vaginal bleeding or the specific change in the patients' menses.

Method: All premenopausal patients between the ages of 18 and 50 who had endometrial tissue sampling by Pipelle biopsy and who had subsequently been diagnosed with endometrial pathology from 2005 to 2009 in Stony Brook University Hospital satellite clinic were included in the study. Endometrial pathology here was defined as endometrial hyperplasia or cancer. The patients were searched for by procedure code for endometrial biopsy and by presence of endometrial pathology. Exclusion criteria included those known to be postmenopausal, patients with preexisting uterine malignancies, those with insufficient sampling from endometrial biopsies, or those with no pathology identified. Data was collected in a de-identified fashion by searching for ICD-9 code for endometrial biopsy. The points collected included age, parity, BMI/weight, menstrual irregularities or bleeding profile, length of time the menstrual irregularity had existed, history of exogenous estrogen use, medical co-morbidities including diabetes or hypertension, history of infertility, history of PCOS, the biopsy result, and family history. The statistical program SPSS was used to run a descriptive statistical analysis of the data collected.

Results and Conclusions: Pending

MRI Versus Ultrasound in the Diagnosis of Placenta Accreta: A Retrospective Analysis

Michael Vizcarra, MD, Nancy Budorick, MD and Reinaldo Figueroa, MD

Objective: While the overall incidence of placenta accreta ranges from 0.01 to 0.9 %, the risk of placenta accreta with placenta previa ranges from 3.3 to 67 % depending on the number of previous cesarean deliveries. MRI is thought to be useful as an adjunct to ultrasound in evaluating posterior placental invasion, in determining depth of invasion, in confirming thinning of the retroplacental myometrium, for better depiction of extent of placental invasion and extent of cervical involvement. Some investigators have not found MRI to be as useful in the management of placental accreta. This study aims to determine the accuracy of predicting placenta accreta using ultrasound and MRI, and the utility of various sonographic and radiographic markers in cases of suspected placental invasion.

Methods: A retrospective analysis was performed on 38 consecutive pregnant women who underwent MRI studies between 2005 and 2010 for evaluation of placenta accreta based on clinical history, ultrasound findings or both. The study was approved by the Institutional Review Board. All women had an obstetric ultrasound before the MRI; all MRI studies were performed at Stony Brook University Hospital. The ultrasound and MRI images were reviewed by an experienced radiologist who was blinded to the original reports. Clinical history, ultrasound and MRI findings, delivery and pathologic outcomes were recorded. Criteria utilized to determine ultrasound suspicion of placenta accreta included thinning or loss of retroplacental myometrial mantle, increased intraplacental vascularity, intraplacental lacunae, loss of bladder wall echogenicity, placental protrusions into bladder, placental extension into broad ligament, and abnormal cervical anatomy. Positive ultrasound findings were further categorized by extent of invasion as focal, regional, or most of placenta. Criteria utilized to determine MRI suspicion of placental invasion included bulging contour of the uterus, dark intraplacental bands, thinning or loss of retroplacental myometrial mantle, homogeneous or heterogeneous placental appearance, intraplacental hemorrhage, loss of bladder wall signal, placental protrusions into bladder, placental extension into broad ligament, and abnormal cervical anatomy. Ultrasound and MRI findings were compared to clinical and pathologic outcomes and classified as true positive (TP), true negative (TN), false positive (FP), and false negative (FN).

Results: In progress.

Conclusion: Pending.

Mini-Laparotomy Versus Laparoscopy for Gynecologic Conditions

Amanika Kumar, MD and Michael Pearl, MD

Objectives: The purpose of this study was to examine conversions, operative time, estimated blood loss for patients undergoing mini-laparotomy versus laparoscopy for gynecologic conditions.

Methods: Data was collected in a retrospective manner including patients undergoing surgery by laparoscopy or mini-laparotomy for gynecologic conditions at Stony Brook University Hospital from 1/2002-3/2011. Patients who had a hysterectomy, cancer staging procedure, pregnancy-related procedure, or exclusively diagnostic procedure were not included. Data was collected and analyzed in SPSS for windows 18.0.

Results: A total of 950 charts were examined, and 493 patients met the inclusion criteria, 141 patients in the mini-laparotomy group and 352 patients in the laparoscopy group. The groups had similar indications for surgery and level of surgical assistant, but were different in regards to age, BMI, and primary surgeon's field of expertise. Patients undergoing mini-laparotomy had a statistically significant shorter mean intra-operative time (49.25 vs. 91.5 minutes, p=.003). Mini-laparotomy patients also had a significantly lower estimated blood loss (19.6 cc vs 32.11 cc, p=.0001). Neither total complication rate nor any individual complication (conversion, re-operation, re-hospitalization, emergency department visit, wound complication) was not statistically different between the two groups.

Conclusions: Mini-laparotomy is a safe alternative to what is considered the traditional minimally invasive approaches in gynecology and may offer additional benefits of shorter intra-operative time and smaller blood loss.

Intra- and Inter-Observer Variability in the Evaluation of First Trimester Placental Volume by 3D Ultrasound

Jolene Muscat, MD, Martin Chavez, MD and Paul L. Ogburn, MD

Introduction: Placental dysfunction has been implicated in a variety of obstetrical complications, including fetal growth abnormalities, preeclampsia, abruptio placenta, amniotic fluid abnormalities and preterm delivery. Ultrasound characteristics of the placenta, including assessment of placental volume by 3-dimensional ultrasound (3DUS) may provide information regarding placental health and function. Incorporating placental volume assessment into a first trimester genetic screening protocol may assist in identifying women at risk for adverse pregnancy outcome. However, prior to incorporating placental volume assessment in routine first trimester screening, its reproducibility and measurement error must be assessed.

Objective: To evaluate the intra-observer and inter-observer variability of 3D ultrasound assessment of placental volume at the time of first trimester ultrasound screening.

Materials and Methods: This was a prospective cohort study of women aged 18 or over with singleton gestation presenting to Winthrop Perinatal Associates between 11 and 14 weeks gestation for routine first trimester aneuploidy screening. At the time of enrollment, basic demographic data and obstetrical history was recorded. During the first trimester ultrasound examination, in addition to the images routinely taken as part of the standard aneuploidy screening protocol, a 3D volume sweep of the placenta was obtained and images stored for later analysis. The placental volume was measured using the GE 4D view software VOCAL application in a random sample of 25 patients by 3 independent observers. For each patient, the placental volume was measured two times by each observer and the mean of the two measurements was used as the final measurement for each observer. Each operator was blinded to their first and each other's placental volume measurements. Intra- and inter-observer variability was determined and expressed as an intraclass correlation coefficient (CC) and interclass CC respectively. A coefficient of variation (CV) was obtained and Bland-Altman plots constructed to further evaluate measurement error.

Results: A random sample of 25 patients was selected from a total of 69 patients enrolled. A normal distribution of placental volumes for each observer was confirmed by the Shapiro-Wilk test. The overall mean placental volume ranged from 16.9 cm3 – 151.9 cm3. Intra- and inter-observer correlation results are summarized in Tables 1 and 2.

Table 1:

Intra-observer Correlation of Placental Volume Measurement

	Mean of First Measurement (cm3)	Mean of Second Measurement (cm3)	Intra-observer CC (95% CI)	Coefficient of Variation
Observer 1	73.9 ± 36	74.3 ± 35	0.99 (0.98-0.99)	4%
Observer 2	70.9 ± 35	73.0 ± 35	0.97 (0.94-0.99)	8%
Observer 3	70.4 ± 32	66.3 ± 30	0.89 (0.76-0.95)	15%

Table 2:

Inter-observer Correlation of Placental Volume Measurement

	Observer 1	Observer 2	Observer 3	Inter-observer CC (95% CI)	Coefficient of Variation
Mean Placental Volume (cm3)	74.1 ± 36	72.0 ± 35	68.4 ± 30	.94 (0.88-0.97)	12%

Conclusion: There is a high degree of correlation in the intra- and inter-observer assessment of first trimester placental volume using 3DUS. Placental volume assessment can be easily incorporated into first trimester pregnancy ultrasound evaluation and may assist in identifying pregnancies at most risk for adverse outcome.

Maternal Characteristics Associated with Readmission for Postpartum Preeclampsia

Michael Demishev, MD and Anthony Vintzileos, MD

Introduction: The most common reason for postpartum readmission in our hospital is preeclampsia. Readmissions secondary to preeclampsia may lead to additional maternal morbidity, increased hospital costs and loss of hospital reimbursement.

Objective: To determine characteristics of women who get readmitted for postpartum preeclampsia.

Methods: This was a retrospective chart review of patients with singleton or twin gestation who were admitted to Winthrop University Hospital with a diagnosis of postpartum preeclampsia between January 2003 and July 2009. Patients eligible for inclusion were identified from medical records using the appropriate ICD-9 codes. Medical records for both the delivery admission and postpartum readmission were reviewed. Gestational hypertension was defined by BP greater or equal to 140/90 without laboratory abnormalities or symptoms of preeclampsia. Patients were included if elevated blood pressure (defined by BP greater or equal to 140/90) was documented in the postpartum readmission record. Maternal, obstetrical and pregnancy characteristics were evaluated to determine which, if any, were associated with readmission for postpartum preeclampsia.

Results: 20% of twins had preeclampsia or gestational hypertension during labor admission. 32% of singletons had preeclampsia or gestational hypertension during labor admission. All patients with preeclampsia received magnesium sulfate during labor admission. 30% of patients with no hypertensive complications during labor admission were discharged home with BP ≥130/80. 12% of patients were discharged on antihypertensive medications. 27% of patients who were diagnosed with preeclamspia during labor admission were discharged on antihypertensive medications. 80% of CHTN patients were discharged on antihypertensive medications.

Conclusion: The majority of patients (approximately 70%) readmitted for postpartum preeclampsia had no evidence of preeclampsia or any other hypertensive disorder in the antepartum or intrapartum period.

This subpopulation warrants further investigation to determine characteristics predictive of risk for postpartum preeclampsia.