

*Department of Obstetrics,
Gynecology and Reproductive Medicine*

***THIRTY SECOND
ANNUAL
RESIDENTS & FELLOWS
RESEARCH DAY***

JUNE 13, 2012



**Stony Brook
Medicine**

*Stony Brook University Hospital
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 live activity for a maximum of 6 AMA PRA Category 1TM. 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)

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 Medicine, 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

Kirithi Katkuri, MD, St. Elizabeth's Medical Center, MA
Nikole Ostrov, MD, Minimally Invasive Surgery
Erin Stevens, MD, Gynecologic Oncology Fellowship, SUNY Downstate

2009-2010

Jerasimos Ballas, MD, Maternal Fetal Medicine Fellowship, San Diego, CA
Shelly-Ann James, MD, Mary Washington Hospital, Virginia
Lan Na Lee, MD
Randi Turkewitz, MD, Private Practice, Pennsylvania

2010-2011

Elizabeth Buescher, MD, Minimally Invasive Fellowship, Stanford University, Palo Alto, CA
Joseph Chappelle, MD, Medical Director Labor & Delivery, Stony Brook Medicine, Stony Brook, NY
Elizabeth Garduno, MD, MPH, Minimally Invasive Surgery Fellowship, Stony Brook Medicine, Stony Brook, NY
Donald Phillibert, MD, Drexel University, Philadelphia, PA
Chanda Reese, MD, Private Practice, Coral Springs, FL

ALUMNI RESIDENTS (CONTINUED)

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, Unknown
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, Chair, Department Ob/Gyn, Stony Brook Medicine; CMO, 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, Private Practice, Garden City, 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

2002-2003

Karen Chu, MD, Private Practice, San Francisco, California
JoAnna Paolilli, MD, Private Practice, Mineola, New York
Hera Sambaziotis, MD, MPH, Private Practice, Garden City, New York
Julie Welischar, MD, Private Practice, Setauket, New York

Department of Obstetrics, Gynecology and Reproductive Medicine Stony Brook Medicine

Thirty Second Annual Residents and Fellows Research Day

Chairman:	Todd Griffin, MD
Residency Director:	Michael Lydic, MD
RRD Program Director:	Richard Bronson, MD
RRD Program Committee:	Deborah Duttge Catherine Connelly Terry Leonbruno Darlene Swords

Departmental Faculty:

Kristen Alarcon, NP	Laura Lesch, NP
Susan Altman, CNM, DNP	Michael Lydic, MD
Cecilia Avila, MD	Kristen Marino, CM
David Baker, MD	Careen Mauro, CNM
Richard Bronson, MD	Goldie McBride, CM
Lauri Budnick, MD	Alan Monheit, MD
Christine Conway, MD	Paul L. Ogburn, Jr., MD
James Droesch, MD	Michael Pearl, MD
Heather Findletar, CNM, DNP	J. Gerald Quirk, MD, PhD
Maria Fisher, CNM	Lisa Rimpel, MD
Jennifer Griffith, NP	Carrie Semelsberger, NP
Rosemary Griffith, NP	Natalie Semenyuk, MD
Melissa Henretta, MD, MPH	Amanda Sini, CNM
Jessica Hilsenroth, CNM	Melissa Strafford, MD
Pamela Koch, CNM	Eva Swoboda, MD
Christina Kocis, CNM, DNP	Ann Visser, CNM
	Lee Weiss, MD

Martin L. Stone, MD
Professor Emeritus

Linda Tseng, PhD
Professor Emeritus

LECTURERS AND JUDGES

THIRTY SECOND ANNUAL RESIDENTS & FELLOWS RESEARCH DAY

THE MARTIN L. STONE, MD VISITING LECTURER AND JUDGE

John E. Buster, MD
Professor of Ob/Gyn
Division of Reproductive Endocrinology
Women and Infants Hospital
Providence, Rhode Island

JUDGES

Peter Brink, MD
Professor and Chair
Department of Physiology and Biophysics
Stony Brook Medicine

James Stelling, MD
Clinical Assistant Professor
Department of Ob/Gyn
Stony Brook Medicine

RESIDENTS

CHIEFS
Leia Card, MD Administrative Chief
Diana Garretto, MD Administrative Chief
James MacDonald, MD
Cara Ninivaggio, MD
Viveka Prakash, MD

PGY-3
Rosalie Alvarado, MD
Jenny Blumberg, MD
Jennifer Conway, MD
Amanika Kumar, MD
Michael Vizcarra, MD

PGY-2
Fabiola Balmir, MD
Daniela Carlos Pons, MD
Deepti Nahar, MD
Jane So, MD
Melanie Van Sise, MD

PGY-1
Emily Blanton, MD
Julie Lian, MD
Malini Persad, MD
Kristen Sharar, MD
Ruth Wei, MD

FELLOWS

Maternal Fetal Medicine
Corinne Yeh, MD 1st year
M. Baraa Allaf, MD 2nd year
Michael Demishev, MD 3rd year

Minimally Invasive Surgery
Elizabeth Garduno, MD, MPH

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, Scottsdale, Arizona

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, NY
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, Denver, Colorado
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, 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, Huntington, New York

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

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	<i>Introduction</i> Richard Bronson, MD Residents & Fellows Research Day Program Director
8:35 – 8:50	<i>HER2 Amplicon Gene Profiles in Trastuzumab Resistance Early Breast Cancers</i> Amanika Kumar , MD Faculty Advisor: Lyndsay Harris, MD
8:50 – 9:05	Discussion & Questions - Discussant: Melissa Henretta, MD, MPH
9:05 – 9:20	<i>MRI and Ultrasound in the Diagnosis of Placenta Accreta: A Retrospective Analysis</i> Michael Vizcarra, MD Faculty Advisor: Nancy Budorick, MD
9:20 – 9:35	Discussion & Questions - Discussant: Christine Conway, MD
9:35 – 9:45	<i>Amniopap: A Non-invasive Alternative to Amniocentesis and Chorionic Villus Sampling</i> Fabiola Balmir, MD Faculty Advisor: James Stelling, MD
9:45 – 9:55	Open Discussion
9:55-10:05	<i>A Novel Risk Scoring Tool for VTE in the Postpartum Period</i> Daniela Carlos Pons, MD Faculty Advisor: Joseph Chappelle, MD
10:05-10:15	Open Discussion
10:15-10:25	<i>The Effects of a Standardized Contraceptive Video on the Knowledge and Utilization of Contraception in the Postpartum Period</i> Deepti Nahar, MD Faculty Advisor: Melissa Strafford, MD
10:25-10:35	Open Discussion
10:35-10:55	Coffee Break
10:55-11:05	<i>Neonatal Selective Head Cooling: Associated Placental Pathology</i> Corinne Yeh, MD Faculty Advisor: Martin Chavez, MD
11:05-11:15	Open Discussion
11:15-11:25	<i>Can an Electronic Medical Record Improve the Appropriate Selection of Prophylactic Antibiotics?</i> Melanie Van Sise, MD Faculty Advisors: Joseph Chappelle, MD Reinaldo Figueroa, MD

PROGRAM (CONTINUED)

11:25-11:35	Open Discussion
11:35-11:50	<i>First Trimester Placental Cord Insertion and Adverse Pregnancy Outcomes</i> Michael Demishev, MD Faculty Advisors: Martin Chavez, MD Paul Ogburn, MD
11:50-12:05	Discussion & Questions - Discussant: J. Gerald Quirk, MD, PhD
12:05-1:05	<i>Endocrinology of Sexual Dysfunction in Older Women: How to Give Back What Time Takes Away</i> John Buster, MD
1:05-2:05	Lunch
2:05-2:15	<i>Does Laboratory Data Aid in the Diagnosis and Management of Pre-eclampsia?</i> Jane So, MD Faculty Advisor: Joseph Chappelle, MD
2:15-2:25	Open Discussion
2:25-2:40	<i>Cervidil and Induction of Labor: Do Two Cervidils Make a Difference?</i> Jenny Blumberg, MD Faculty Advisors: Paul Ogburn, MD Erin Stevens, MD
2:40-2:55	Discussion and Questions - Discussant: Cecilia Avila, MD
2:55-3:10	<i>The Perineal Simulator: A Novel Model to Improve Resident Understanding of Perineal Anatomy and Obstetric Laceration Classification</i> Jennifer Conway, MD Faculty Advisors: Lauri Budnick, MD Eva Swoboda, MD
3:10-3:25	Discussion and Questions - Discussant: James Droesch, MD
3:25-3:40	<i>Does First Trimester Ultrasound Predict Obstetrical and Neonatal Outcomes in Monochorionic Diamniotic Twin Pregnancies?</i> M. Baraa Allaf, MD Faculty Advisors: Paul Ogburn, MD Anthony Vintzileos, MD
3:40-3:55	Discussion and Questions - Discussant: Paul Ogburn, 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
		2011	Deepti Nahar, 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	2011	Leia Card, 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	1998	Vito Alamia, MD
1986	Timothy Bonney, MD	1999	Lynne Macco, MD
1987	Michael Arato, MD	2000	Siobhan Hayden, MD
1988	Michael Arato, MD	2001	Anne Hunter, MD
1989	Syau-fu Ma, MD	2002	JoAnna Paolilli, MD
1990	Brian McKenna, MD	2003	Sara Petruska, MD
1991	Robert Scanlon, MD	2004	Vanessa Soviero, MD
1992	Stephanie Mann, MD	2005	Megan Lochner, MD
1993	Petra Belady, MD	2006	Meredith McDowell, MD
1994	Felicia Callan, MD	2007	Dympna Weil, MD
1995	Elizabeth Folland, MD	2008	Rupinder Bhangoo, MD
1996	Florence Rolston, MD	2009	Nikole A. Ostrov, MD
1997	David Reavis, MD	2010	Shelly-Ann James, MD
		2011	Amanika Kumar, MD

Resident Teaching Award

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

1990	Brian McKenna, MD	2000	JoAnna Paolilli, MD
	John Wagner, MD	2001	JoAnna Paolilli, MD
1991	Pui Chun Cheng, MD		Hera Sambaziotis, MD
1992	Pui Chun Cheng, MD	2002	Joyce Rubin, MD
1993	Lawrence Weinstein, MD	2003	JoAnna Paolilli, MD
1994	Todd Griffin, MD	2004	Heather McGehean, MD
1995	David Reavis, MD	2005	Anita Patibandla, MD
1996	David Reavis, MD	2006	Anita Patibandla, MD
1997	David Reavis, MD	2007	Anita Patibandla, MD
1998	David Reavis, MD	2008	Jerasimos Ballas, MD
1999	Vito Alamia, MD	2009	Nikole A. Ostrov, M.D
		2010	Diana Garretto, MD
		2011	Fabiola Balmir, MD

HER2 Amplicon Gene Profiles in Trastuzumab Resistance Early Breast Cancers

Amanika Kumar, MD and Lyndsay Harris, MD

Purpose: Trastuzumab is a humanized monoclonal antibody effective against many HER2-positive breast cancers; however, mechanisms of resistance remain elusive. As expression of genes on the 17q12-21 cytoband is a characteristic feature of HER2-positive tumors, we hypothesized that one or more of these genes might alter response to trastuzumab. In addition, we explored the role of coamplicons in response to trastuzumab.

Experimental Design: *HER2* amplicon gene expression was assessed in HER2-positive human tumor specimens and HER2 positive breast cancer cell lines with varying trastuzumab sensitivity, using q-RT-PCR and gene expression profiling. In addition, protein expression of DARPP32/t-DARPP was evaluated in several HER2-positive and –negative human breast tumors using AQUA. Finally, coamplicons in HER2 amplified tumors were evaluated using Illumina SNP array copy number analysis.

Results: In HER2-positive breast tumors from patients on preoperative chemotherapy and trastuzumab, we observed that lower levels of amplicon genes were associated with resistance to trastuzumab. While the copy number of HER2 did not change, we found that amplicon genes *HER2* and *GRB7* are downregulated only in tumors that achieve a pCR. *DARPP-32/t-DARPP* gene expression was higher in resistant cell lines but did not differ in primary breast tumors by response to treatment. Finally, the amplicon gene 11q13 was associated with resistance to trastuzumab.

Conclusions: Further studies are warranted to clarify the relationship between HER2 amplicon genes, coamplicons and response to trastuzumab.

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

Michael Vizcarra, MD and Nancy Budorick, 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 (US) 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 US and MRI, and the utility of various sonographic and radiographic markers in cases of suspected placental invasion.

Methods: A retrospective analysis was performed on 45 consecutive pregnant women who underwent MRI studies between 2005 and 2012 for evaluation of placenta accreta based on clinical history, US findings or both. The study was approved by the Institutional Review Board. All women had an obstetric US before the MRI; all MRI studies were performed at Stony Brook University Hospital. The US and MRI images were reviewed by an experienced radiologist who was blinded to the original reports and outcomes. Clinical history, US and MRI findings, delivery and pathologic outcomes were recorded. Criteria utilized to determine US 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. 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. US 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: 14 out of 45 women had confirmation of placental invasion at delivery. US correctly identified 11 out of 14 cases of invasion and correctly identified 22 out of 31 negatives, corresponding to a sensitivity of 78.5%, a specificity of 70.9%, a positive predictive value (PPV) of 55%, and a negative predictive value (NPV) of 88%. MRI correctly identified 10 out of 14 cases of invasion and correctly identified 25 out of 31 negatives, corresponding to a sensitivity of 71.4%, a specificity of 80.6%, a PPV of 62.5%, and a NPV of 86.2%. US and MRI disagreed in 12 cases. US was correct in 5 cases (4 TN, 1 TP), MRI was correct in 7 cases (7 TN). Statistics of the individual US and MRI features were also calculated, as well as statistics of disease prediction in the varying placental locations.

Conclusion: In this study, US and MRI were similar in overall ability to find or exclude disease. The most effective US features in detecting disease in this population were loss of the myometrial mantle and loss of bladder wall echogenicity. The most effective MRI features in detecting disease were loss of the myometrial mantle and a heterogeneous placental appearance. Placental location may affect the ability of either imaging modality to predict or exclude disease. Since the incidence of placenta accreta is still rising, we advocate continued complementary use of these modalities until enough cases have been characterized to understand their strengths and weaknesses more precisely.

The Martin L. Stone, MD Award

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

1982	Robert O'Keefe, MD	1997	Todd Griffin, MD
1983	Eva Chalas, MD	1998	David Reavis, MD
1984	Jeffrey Porte, MD	1999	Lynn Macco, MD
1985	Eva Chalas, MD	2000	Siobhan Hayden, MD
1986	Jeffrey Porte, MD	2001	Martina Frandina, MD
1987	Christian Westermann, MD	2002	Siobhan Hayden, MD
1988	Timothy Bonney, MD	2003	JoAnna Paolilli, MD
1989	Michael Arato, MD	2004	Patricia Ardise, MD
1990	Marie Welshinger, MD	2005	Heather McGehean, MD
1991	John Wagner, MD	2006	Lynda Gioia, MD
1992	Pui Chun Cheng, MD	2007	Megan Lochner, MD
1993	Lawrence Weinstein, MD	2008	Dympna Weil, MD
1994	Ira Bachman, MD	2009	Erin Stevens, MD
1995	Ira Bachman, MD	2010	Randi Turkewitz, MD
1996	James Stelling, MD	2011	Elizabeth Garduno, MD

The Voluntary Clinical Faculty Award

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

1995	Richard Halpert, MD	2004	James Stelling, MD
1996	Christian Westermann, MD	2005	James Droesch, MD
1997	James Droesch, MD	2006	James Droesch, MD
1998	Deborah Davenport, MD	2007	Jeffrey Porte, MD
1999	Christian Westermann, MD	2008	James Droesch, MD
2000	Abraham Halfen, MD	2009	James Stelling, MD
2001	Abraham, Halfen, MD	2010	David Reavis, MD
2002	Todd Griffin, MD	2011	David Reavis, MD
2003	Philip Schoenfeld, MD		

Amniopap: A Non-invasive Alternative to Amniocentesis and Chorionic Villus Sampling

Fabiola Balmir, MD and James Stelling, MD

APPENDIX

PAST AWARD WINNERS

AND

ALUMNI

Amniocentesis and chorionic villus sampling have long been a modality for assessing fetal cells for trisomies 13, 18, and 21. Unfortunately, amniocentesis and chorionic villus sampling also have risks such as spontaneous abortion, cramping, injury to the fetus via the needle, leaking of amniotic fluid, Rh sensitization, infection, and transmission of maternal infections to the fetus. Fetal cells can also be gathered from pregnant women via cervical swabbing with little or no risk to the pregnancy.

Objective: To attain fetal cells from cervical swabbing and analyze these cells for trisomies 13, 18, and 21 as well as other chromosomal mutations.

Methods: Fetal cells will be isolated from the cervical mucous of pregnant women between 5-41wks gestation. These cells will then be placed within a collagen matrix to select for cytotrophoblastic fetal cells. Isolated cells will then be confirmed using flow cytometry with positive and negative selective antibodies. Confirmed fetal cells will then be analyzed using comparative genomic hybridization (CGH). Results of CGH will then be compared to those of amniocentesis or chorionic villus sampling.

Conclusions: Fetal cells can be attained and analyzed for chromosomal abnormalities effectively through non-invasive cervical swabbing with results comparable to those of amniocentesis or chorionic villus sampling.

A Novel Risk-Scoring Tool for VTE in the Postpartum Period

Daniela Carlos Pons, MD and Joseph Chappelle, MD

Objective: Venous thromboembolism events (VTEs) are among the leading causes of maternal morbidity and mortality. Most VTEs associated with pregnancy occur in the postpartum period. Sequential Compression Devices, early ambulation, and low molecular weight heparin have made an impact on the rate of VTE, however no set guidelines have been established. Multiple conditions have been identified as being at high risk for a VTE and relative risk scores have been established with retrospective data. Using this data a novel risk-scoring tool has been developed for the postpartum period.

Methods: A risk-scoring tool was created using published odds ratios for known VTE risk factors. Women between ages of 13 and 55 with an ICD9 code for VTE who delivered at Stony Brook Hospital between January 2005 and December 2010 were identified. Women diagnosed with a VTE in the post partum period were included while those with a VTE diagnosed prior to delivery were excluded from analysis. Charts were reviewed for risk factors and demographics and a score was applied to each woman. Additionally, the first 100 women from each year of the study were reviewed and the score was applied to them as a control group. The groups were compared using a student t test.

Results: Data collection in progress.

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

Dr. Alvarado's double blind randomized control study has been extended to next year due to the unforeseeable national shortage of bupivacaine.

Does First-Trimester Ultrasound Predict Obstetrical and Neonatal Outcomes in Monochorionic Diamniotic Twin Pregnancies?

M. Baraa Allaf, MD, Paul Ogburn, MD and Anthony Vintzileos, MD

Objective: To determine the associations of discordant nuchal translucency (NT) or crown-rump length (CRL) measurements at the time of aneuploidy screening with adverse obstetrical and neonatal outcomes.

Study Design: A multicenter, retrospective cohort study in 6 regional perinatal centers in the Northeastern United States. All monochorionic-diamniotic (MCDA) twin pregnancies with two live fetuses at the 11–14 week ultrasound examination and serial follow-up ultrasonography until delivery were included. The NT and CRL discordances were calculated as the difference between the two fetuses expressed as a percentage of the larger measurement. Composite obstetrical outcome included any of the following: IUFD, twin-to-twin transfusion syndrome (TTTS), intrauterine fetal growth restriction (IUGR) or preterm birth ≤ 32 weeks. Composite neonatal outcome included any of the following: Apgar score < 7 at 5 minutes, respiratory distress syndrome, intraventricular hemorrhage, necrotizing enterocolitis, early onset sepsis, or neonatal demise. We defined NT discordance as $\geq 20\%$ and CRL discordance as ≥ 15 . Receiver operating characteristic (ROC) curves of NT and CRL discordance cut-offs were also developed for the prediction of composite obstetrical and neonatal outcomes.

Results: A total of 166 twin pregnancies met inclusion criteria. Mean first-trimester gestational age was 12.4 ± 0.6 weeks. A 20.5% ($n=34$) twin pregnancies had NT discordance and 16.2% ($n=27$) had CRL discordance. Mean (\pm SD) gestational age at delivery was 34 ± 4.3 weeks. A total of 42 (25.3%) pregnancies were found to have adverse composite obstetrical outcome. Pregnancies with adverse obstetrical outcome were: TTTS in 12 (7.2%) pregnancies, IUGR in 12 (7.2%) pregnancies, IUFD in 10 (6%) pregnancies and 23 (13.8%) pregnancies with preterm birth ≤ 32 weeks. There was no significant difference in the adverse composite obstetrical outcome between twins with and without NT discordance (26.1% vs 19.1%; $p=0.34$) likewise between twins with and without CRL discordance (16.6% vs 16.2%; $p=0.95$). Neither ROC curve was discriminating between NT or CRL discordance and the prediction of adverse composite obstetrical or neonatal outcome.

Conclusion: In our population, NT or CRL discordance in monochorionic-diamniotic twin pregnancies was not associated with increase in adverse composite obstetrical or neonatal outcome.

The Effects of a Standardized Contraceptive Video on the Knowledge and Utilization of Contraception in the Postpartum Period

Deepti Nahar, MD and Melissa Strafford, MD

Background: The current practice at Stony Brook University Hospital is for patients to receive postpartum contraception counseling on an individual provider to patient basis. This counseling is neither uniform nor standardized, and therefore, the information provided may vary drastically. There is not a system in place to adequately analyze the use of and knowledge of contraception in the postpartum patient population at Stony Brook University Hospital.

Objective: We hypothesize that the use of standardized audiovisual materials will increase patients' knowledge and utilization of contraception in the postpartum period. The objective of this study will be to evaluate our patients' knowledge, satisfaction, and utilization of contraception counseling as currently provided and to develop and evaluate a standardized system of providing postpartum contraception counseling. The long term goal is to decrease unintended pregnancies and their associated effects and consequences.

Methods: We will perform a prospective cohort study to compare family planning counseling as currently provided with counseling using standardized audiovisual materials. In order to do this, we will employ the use of questionnaires administered on the postpartum unit to evaluate patients' knowledge of postpartum contraception, intended contraception use, and satisfaction with contraception counseling. We will also conduct follow-up telephone interviews at eight weeks postpartum to evaluate patient's current method of birth control.

Results: Pending.

Neonatal Selective Head Cooling: Associated Placental Pathology

Corrinne Yeh, MD and Martin Chavez, MD

Objective: To characterize the placental findings of neonates that underwent selective head cooling for treatment of hypoxic-ischemic encephalopathy (HIE).

Method: This is a retrospective descriptive study of placentas of neonates that underwent selective head cooling for HIE from 1/2008 to 7/2011. Placental findings were reviewed by a single perinatal pathologist. Additional data were obtained from the medical record.

Results: Placental information was available for all 9 neonates who underwent selective head cooling during the study period (n=9). The median gestational age at delivery was 37 6/7 weeks (range 35 4/7-40 4/7 weeks). The median placental weight was 428 g (range 254-584 g). Three (33%) of the placentas had chronic findings only, 3 (33%) had acute or subacute findings only, and 3 (33%) had both chronic and acute findings or events (i.e., uterine rupture). Several placentas had multiple findings as noted in Table 1.

Subject Number	1	2	3	4	5	6a	7	8	9
Chronic Findings									
Placental Weight < 10 percentile				X	X	X	X		
Infarct					X		X		
Atherosis					X				
Chronic Villitis								X	
Fetal Thrombotic Vasculopathy			X						
True Knot			X						
Acute Findings									
Severe Chorioamnionitis with Funisitis							X		
Retroplacental Hematoma		X			X				
Meconium Deposition	X								
Intramembranous Vessel, Torn With Hemorrhage									X
Subacute Findings									
Increased Nucleated Red Blood Cells	X								

a Uterine rupture was noted at delivery

Conclusion: The placental lesions of neonates that undergo selective head cooling for treatment of HIE are varied and include both acute and chronic lesions. In our study, 66% of the placentas were associated with an acute event or had pathologic evidence of acute clinical processes that may have contributed to the development of HIE. The acute nature of these findings suggests that up to 66% of HIE cases could possibly be prevented. Further study with clinical correlation is warranted to identify antepartum factors that could be useful for assessing the risk of neonatal hypoxic-ischemic encephalopathy and provide opportunities for its prevention.

The Perineal Simulator: A Novel Model to Improve Resident Understanding of Perineal Anatomy and Obstetric Laceration Classification

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

Objective: The Perineal Simulator is an inexpensive, easily constructed 3-D model for teaching perineal anatomy and practicing obstetric laceration repair. The objective of this study is to assess the validity of a reproducible video demonstration of the Perineal Simulator as a tool for resident education.

Methods: The Perineal Simulator was quickly and easily constructed using inexpensive items including: a foam cup holder, sheets of felt, sheets of foam, pipe cleaners, and a needle and thread. A total of 43 ob-gyn residents from the Stony Brook University Hospital and SUNY Downstate viewed 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 completed pre- and postintervention self-assessment questionnaires.

Results: Collection in process.

Conclusion: Pending.

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

Jenny Blumberg, MD; Erin E. Stevens, MD; Paul L. Ogburn, MD and Priya Zachariah

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 was conducted examining induction of labor at Stony Brook University Medical Center using Cervidil. Patients were included in the study if they had an unfavorable Bishop's score after the first dose of Cervidil ([defined as simplified Bishop's score <5](#)). Exclusion criteria were multiple gestations, prior cesarean section or uterine scar, placenta previa, or other contraindications to vaginal delivery. Patients were also excluded if they were discharged from the hospital prior to delivery or if they were noted to have intrauterine fetal demise. Patients who had two doses of Cervidil were compared with patients who received one Cervidil followed by a different method of induction. The primary outcome was 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 included duration of induction, neonatal and maternal outcomes.

Results: The electronic medical record was searched to identify all patients who received a Cervidil between January 2008 (the start of computerized medication administration records) and April 2011. 1016 patients were identified who met inclusion criteria and had an unfavorable Bishop's score after the first dose of Cervidil. Of those 1016 patients, 9 received amniotomy as their secondary method of induction, 295 patients received a second dose of cervidil, 584 patients received pitocin, 62 patients had Pitocin with a foley balloon, and 66 had no specified secondary method of induction. Statistical analysis of the results is pending at this time.

Can an Electronic Medical Record Improve the Appropriate Selection of Prophylactic Antibiotics?

Melanie Van Sise, MD, Joseph Chappelle, MD and Reinaldo Figueroa, MD

Objective: To study the impact of reference text in an electronic medical record on the appropriate utilization of preoperative antibiotics for cesarean deliveries

Methods: All cesarean deliveries at Stony Brook University Medical Center performed between May 2009 and June 2011, the year before and after the addition of reference text to the EMR, were included for review. Data was collected regarding the type and amount of antibiotic ordered preoperatively, as well as the patient's BMI, drug allergies, and diagnosis of chorioamnionitis. Those with chorioamnionitis were excluded. Chi square analyses and t-tests were performed to study differences between the groups.

Results: Of the 2273 deliveries identified, 172 were excluded for chorioamnionitis or incomplete medical records. The pre and post intervention groups had a similar number of women and demographics with BMI as an exception 33.3 compared to 32.6 ($p=0.05$). There was a significant increase in the number of patients receiving adequate antibiotics from 85.7 to 92.6% ($p<.005$).

Conclusion: Reference text included within the EMR prompting physicians to select the appropriate and adequate amount of antibiotics significantly improves preoperative antibiotic utilization.

First Trimester Placental Cord Insertion and Adverse Pregnancy Outcomes

Michael Demishev, MD, Martin Chavez, MD and Paul Ogburn, MD

Objective: The primary objective was to correlate abnormal placental cord insertion (PCI) found in a routine 1st trimester ultrasound with adverse pregnancy outcomes. A secondary objective was to define the changes in PCI between first (11-14 weeks) and second trimester (19-22 weeks).

Methods: This was a 2- year prospective cohort study of women recruited at 11 to 14 weeks' gestation during routine aneuploidy screening. During nuchal translucency examination (NT) PCI was measured as shortest distance from the cord insertion to the placental edge in two perpendicular planes. Abnormal PCI was defined as the shortest distance between PCI and the edge of the placenta being within 2 cm. The umbilical cord insertion site was again evaluated at the time of anatomic survey. Information on maternal demographics, medical conditions, sonographic findings, antenatal course, pregnancy outcome data, and pregnancy complications were documented from hospital medical records. Adverse pregnancy outcomes were defined as preterm delivery (PTD), spontaneous or indicated as a primary outcome and small for gestational age (SGA) as a secondary outcome. PTD was defined as delivery prior to 37 weeks' gestation and SGA was defined as birth weight less than or equal to 10% for gestational age. A composite adverse pregnancy outcome was defined as pregnancies that resulted in any of the following: low birth weight (LBW), preeclampsia (PEC), intrauterine fetal demise (IUID), neonatal intensive care unit (NICU) admission, and APGAR score less than or equal to 7 at 1 or 5 minutes. Univariate analyses and multivariate logistic regression analyses were used to determine if abnormal PCI is associated with adverse pregnancy outcomes. Results were considered statistically significant when $p < 0.05$.

Results: Data collection in process.

Conclusion: Pending.

Does Laboratory Data Aid in the Diagnosis and Management of Preeclampsia?

Jane So, MD and Joseph Chappelle, MD

Objective: Preeclampsia occurs in 6-8% of pregnancies and is the second leading cause of maternal mortality in the United States. Preeclampsia is associated with hemolysis, elevation of liver enzymes and depressed platelet counts in 1.8-7% of women with pregnancy related hypertension. Abnormal lab values are associated with increased maternal and fetal morbidity and it has become a common practice to obtain these laboratory values in patients who present with elevated blood pressures. However, regardless of laboratory abnormalities, many of these patients already carry a diagnosis of severe disease based on blood pressure and symptoms. Our objective is to investigate the rate of abnormal laboratory values in our population and identify any associated risk factors.

Methods: The study is a retrospective analysis of women who presented to Stony Brook University Hospital between January 2005 and December 2010 with a diagnosis of gestational hypertension, preeclampsia, or eclampsia as identified by ICD-9 codes. The charts were reviewed for demographics, gestational age, pregnancy history, signs and symptoms, blood pressure ranges, and laboratory data. Student's t-test and Fischer's exact test will be used to compare women with normal laboratory values with women with abnormal laboratory values.

Results: Data collection in process.