



2016 Annual Report

# Innovation in Women's Healthcare

Innovation is the hallmark of NorthShore's Department of Obstetrics and Gynecology. We consistently develop and implement patient care improvements, aggressively refine new teaching strategies, and discover and apply new knowledge.

This 2016 Annual Report showcases multiple examples of our leadership and bright future in women's health. On pages 10 and 11 specifically, you'll see snapshots of where we are today and most importantly, what we are focusing on for tomorrow.

My thanks to all department members for their unwavering commitment to deliver on NorthShore's mission "to preserve and improve human life."

Richard K. Silver, MD  
Clinical Professor and Chair  
NorthShore University HealthSystem  
Department of Obstetrics and Gynecology

## Clinical Care

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## CLINICAL CARE DIVISION REPORTS

# Obstetrics and Gynecology

## Obstetrics



**Mark Neerhof, DO**  
Division Director and  
Clinical Associate Professor



**Marion Jelcz, MD**  
Associate Director and  
Senior Clinician Educator

### Clinical Mission and Services

The Division of Obstetrics is dedicated to preserving and improving the health of women and newborn infants. We are focused on providing the highest standard of care both during and after pregnancy. We provide unsurpassed educational opportunities for students, residents and fellows in an effort to ensure that clinical excellence will be perpetuated. We are also committed to increasing the body of knowledge in women's health through research.

### Division Committees

The following multidisciplinary committees are active in the Division:

- The Obstetric Practice Committee reviews, updates and publishes practice guidelines for the Division.

- The Perinatal Quality Review Committee reviews care surrounding clinical indications and unanticipated outcomes.
- The Obstetric Multidisciplinary Performance Improvement Committee reviews quality data and implements initiatives and training programs in order to maximize patient safety.

### 2016 Highlights and Achievements

- Clinical outcomes at NorthShore continue to compare favorably to similar high acuity institutions across the country. Data compiled by the National Perinatal Information Center demonstrates that at NorthShore, the cesarean section rate is lower and the vaginal birth after cesarean (VBAC) rate is higher when compared to a subgroup of similar institutions (academic regional perinatal centers) as well as to the entire database that includes all types of hospitals. Our commitment to clinical excellence has resulted in these favorable outcomes for our patients.
- The Breastfeeding Peer Counselor Program (BPCP) was launched at NorthShore Evanston Hospital to improve exclusive breastfeeding adoption among women and their babies. The American Congress of Obstetricians and Gynecologists recommends exclusive breastfeeding for the first six months of life. However, low-income mothers are less likely to breastfeed. The BPCP provides a specially trained paraprofessional Peer Breastfeeding Counselor to support this population, improve breastfeeding rates and reduce disparities within our community.
- A triage program has been implemented in the Evanston Women's Hospital Labor and Delivery unit. Rooms have been dedicated to patients presenting to Labor and Delivery staffed by an Advanced Practice Nurse focusing on efficiently triaging patients. The purpose of this program is to optimize workflow, increase efficiency and maximize patient safety.

## Obstetrics and Gynecology *continued*

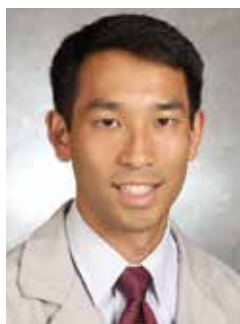
- On-Time Starts is a program implemented in 2016 to monitor and achieve timely surgical starts and improve surgical schedule reliability. On-Time Starts also aims to improve workflow and reduce congestion in the schedule. The percentage of on-time starts has increased, and the average delay of cases has decreased in 2016 as a result of the program.
- A newly formed team, the Surge Capacity Committee, is charged with developing a strategy for efficiently managing unexpected spikes in patient volume which also optimizes patient safety and satisfaction.
- The Division of Obstetrics planned two educational programs for physicians and nurses that focus on obstetric hemorrhage and perinatal hypertension, two of the most common obstetric emergencies. Our ultimate goal is to ensure that these and other educational programs are incorporated into ongoing “refresher courses” for all providers in the Division.

## Personalized Medicine Designed to Excel in Obstetric Outcomes

**Personalized care improves management of labor which, in turn, reduces cesarean section rate and increases vaginal birth after cesarean section.**

	NorthShore	Subgroup Average	Database Average
Deliveries	4,803	3,759	3,600
Babies born	4,974	3,883	3,659
<b>Primary cesarean section rate</b>	<b>14.4%</b>	<b>18.7%</b>	<b>17.6%</b>
<b>Repeat cesarean section rate</b>	<b>12.0%</b>	<b>14.0%</b>	<b>15.5%</b>
<b>Total cesarean section rate</b>	<b>26.5%</b>	<b>32.7%</b>	<b>33.0%</b>
<b>VBAC rate</b>	<b>22.8%</b>	<b>19.0%</b>	<b>13.5%</b>
Postpartum readmission (within 42 days of discharge)	1.1%	1.3%	0.9%

## Gynecology



**Frank Tu, MD, MPH**

*Vice Chair of Quality, Division Director and Clinical Associate Professor*

### Clinical Mission and Services

The Division of Gynecology promotes evidence-based procedural management of gynecological disorders throughout the continuum of outpatient and inpatient settings. Members are committed to lifelong and collaborative learning for the benefit of our patients. We enjoy a strong relationship with hospital-based quality in support of safety, cost-effectiveness and patient-centered care.

### 2016 Highlights and Achievements

- Frank Tu, MD, MPH, as Division Director and Jeremy Miller, MD, as Associate Division Director succeeded Kenneth Nelson, MD, after his long and successful tenure providing oversight to this Division.
- The Division of Gynecology began work on two exciting initiatives. Leadership from Gynecological Pain and Minimally Invasive Surgery and Urogynecology are working with the Department of Neurology to build within our Electronic Medical Record a workflow to automate consistent capture of perioperative data for patients undergoing gynecological surgery. This eventually should allow us to realize aggregate assessment of Department-wide operative outcomes. It dovetails with a separate plan in collaboration with Rebecca Blumenthal, MD, in the Department of Anesthesiology and Mary Jo Sperling, RN, in Quality to implement Enhanced Recovery After Surgery workflows. Such efforts have been shown by our Mayo Clinic partners to markedly improve patient and provider satisfaction while minimizing opioid usage in the perioperative setting. This is one of the first formal NorthShore projects in concert with the Mayo Collaborative Care Network.

- The Division continues to strongly support a robust peer-review process of our ongoing care. A multidisciplinary Gynecologic Morbidity and Mortality Committee—chaired by Dr. Jeremy Miller along with Janet Tomescko, MD, as Vice Chair—convenes monthly. Cases for Committee review are selected from a list of cases identified by specific criteria that may be related to surgical complications. The criteria include longer than expected operating time, intraoperative consultation, intraoperative transfusion, unanticipated Intensive Care Unit admission, postoperative febrile morbidity, thromboembolic events and readmission within 30 days. Cases are also referred from various teams including Nursing and Quality. The review process ensures anonymity, open dialogue, multidisciplinary perspectives and collaborative disposition. At the recommendation of the Committee chairs, cases may be referred to the Division Director and/or the Department Chairman for additional review, education and process improvement. In 2016, the Committee reviewed 102 cases of which 15 percent were referred for additional review. The process continues to provide Department members with education with a goal of overall improved patient care and safety.
- Members of the Department continue to volunteer to assist with resident training with simulation in the Grainger Center for Simulation and Innovation. Dr. Frank Tu does weekly simulation training with the senior residents, while Dr. Jeremy Miller meets with the entire team for weekly case discussions. Urogynecology hosts a weekly lecture series with the residents, while the senior residents run tumor board conferences with Gynecologic Oncology.
- Gynecologic surgeons continue to work with hospital administration to find ways to optimize surgical performance. Among the processes under scrutiny this year is optimization of operative hysteroscopy.
- The NorthShore Women’s Hospital at Evanston was awarded Top Performer in patient loyalty for both the 2 Women’s and 3 Women’s units. Top Performer awards are based on patient survey results and reflect the high praise from our patients and the dedication of the team to deliver exceptional care. These awards demonstrate the commitment to ensuring that every gynecologic patient feels clinically cared for and personally cared about during every visit.



## Gynecologic Oncology



**Gustavo Rodriguez, MD**

*Division Director and Clinical Professor*

### Clinical Mission and Services

Advances in both surgery and chemotherapy over the past decade are leading to improved outcomes in women with gynecologic cancers, including higher cure rates. The Division of Gynecologic Oncology has been at the forefront of this progress, supporting an aggressive research program aimed at prevention, early detection and improved treatment for ovarian and other pelvic cancers. The Division sees patients at all four NorthShore Hospitals and brings together a collaborative team that employs a multidisciplinary approach to treating women with malignant or premalignant conditions of the gynecologic tract. Our mission is to provide our patients comprehensive and compassionate care while performing basic and clinical research that will make a significant impact in our community and beyond.

### 2016 Highlights and Achievements

- The outstanding quality of care provided by the Division was recognized again in 2016 with Press Ganey scores that are near the top for the NorthShore Medical Group and in the 92nd percentile nationwide for gynecologic oncology programs.
- Jean Hurteau, MD, is spearheading a robust clinical trials program with a number of trial opportunities for women with gynecologic cancers. He continues to play an active role in protocol development within the Gynecologic Oncology Group, a national research consortium that is a leading organization in clinical research. Clinical trials that are open at NorthShore include a study evaluating the role of adding PARP (poly ADP ribose polymerase) inhibitors, an exciting new class of drug, to standard chemotherapy for ovarian cancer.
- Our multidisciplinary team cares for a growing number of patients, leveraging the latest technology and innovative techniques, including robotic surgery and other minimally invasive procedures. Carolyn Kirschner, MD, directs our minimally invasive program, which has been among the most active in gynecologic oncology in the city of Chicago. Elena Diaz Moore, MD, is spearheading palliative care initiatives and is the Principal Investigator of a study evaluating the impact on quality of life via early involvement of a palliative care team. She was also the recipient of a

NorthShore Department of Obstetrics and Gynecology Innovation Grant to critically evaluate chemotherapeutic approaches for women with advanced ovarian cancer.

- Work continued under the support of a multimillion-dollar grant from the Department of Defense, as well as philanthropic sources for studies related to the pharmacologic prevention of endometrial cancer and ovarian cancer. These studies are led by Gustavo Rodriguez, MD, and his laboratory team and include collaborations with scientists at Harvard University, Inova Health System and Walter Reed Army Medical Center.
- Dr. Gustavo Rodriguez was again awarded a grant from Bears Care to support research related to ovarian cancer prevention. In addition, funds from The Auxiliary of NorthShore were also used not only in support of the ovarian cancer prevention bench research, but also in support of the Clinical Gynecologic Cancer Prevention Program
- The Division is very excited to have recruited a new partner, Mary Tilley Jenkins Vogel, MD. She trained at the University of California Los Angeles Cedars-Sinai Medical Center and received numerous awards for her excellence in care, research and compassion. She is seeing patients at both the Evanston and Glenbrook campuses.
- Carolyn Kirschner, MD, is transitioning from formal gynecologic oncology practice to devote her talents in the area of cancer survivorship, as well as her long-standing mission work in Nigeria.

### Personalized Medicine to Prevent Gynecologic Cancer

The Clinical Gynecologic Cancer Prevention Program at NorthShore seeks to screen women in our community for ovarian and endometrial cancer risk, with implementation of tailored strategies to mitigate risk. Many women in our community have an increased genetic-based risk for both breast and gynecologic cancer. This sets the stage for a personalized approach to cancer prevention and treatment. Research is under way on a risk-reducing strategy of fallopian tube removal for the prevention of ovarian cancer. The Program has a close collaboration with Katharine Yao, MD, who is overseeing the Breast Screening and Cancer Prevention Program in the NorthShore Department of Surgery.

## Maternal-Fetal Medicine



**Scott MacGregor, DO**

*Vice Chair for Specialty Care,  
Division Director  
and Clinical Professor*

### Clinical Mission and Services

The Division of Maternal-Fetal Medicine (MFM) is a group of 10 specialists committed to clinical service, research and education related to patients with high-risk pregnancies. The Division's commitment to quality and patient loyalty is evident in the Fetal Diagnostic Centers (FDCs) of the Centers for Maternal and Fetal Health (CMFH) at Evanston Hospital and in each of the seven satellite sites throughout the north and northwest Chicago metropolitan area. CMFH consolidates the services of the Division of Maternal-Fetal Medicine offering integrated and advanced technology and personalized care.

### 2016 Highlights and Achievements

- The Division has continued its commitment to quality improvement, research activities and educational opportunities in the past year. The Division's care sites include Evanston Hospital and seven other FDC locations in Glenview, Highland Park, Lake Forest, St. Francis–Evanston, Arlington Heights, Libertyville and Gurnee.
- The FDCs provided more than 30,000 services and are certified by the American Institute of Ultrasound in Medicine. The ultrasonographers maintain certification in first trimester genetic screening of both nuchal translucency and nasal bone assessment. The CMFH continues to be one of the leaders in genetic screening and testing.
- The commitment to quality extends into the Division's educational programs and research activities. NorthShore is the primary site for the University of Chicago-sponsored MFM fellowship training program under the direction of David Ouyang, MD. In 2016, Edom Yared, MD, and Alicia McCarthy, MD, PhD, graduated from the program with three fellows: Amanda Stephens, MD (postgraduate year 7), Patrick Schneider, MD (postgraduate year 6), and Lena Braginsky, MD (postgraduate year 5) currently matriculated.
- The Division developed a curriculum for simulation training for physicians, fellows, residents and students at the Grainger Center for Simulation and Innovation (GCSI). Ian Grable, MD, MPH, provides leadership of the program and curriculum development. Simulation training includes skill acquisition in vaginal delivery, shoulder dystocia, preeclampsia, obstetric hemorrhage, breech delivery, perineal laceration repair, suturing, dilation and curettage, intrauterine device placement.

- Dr. Ian Grable completed the Medical Education Research, Innovation, Teaching and Scholarship (MERITS) fellowship through the University of Chicago. This highly competitive program provides scholars with the conceptual and practical skills for successful careers in medical education. Dr. Grable also was promoted to the rank of Clinical Associate Professor at the University of Chicago Pritzker School of Medicine.
- Our Division is also dedicated to education and quality improvement for obstetric patients in the State of Illinois and the Illinois Regionalized Perinatal System. Ann Borders, MD, MSc, MPH, has completed another year as Executive Director of the Illinois Perinatal Quality Collaborative (ILPQC). ILPQC was formed in 2013 upon recommendation of the Illinois legislature with support of the Illinois Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant and March of Dimes (MOD) to form a state-wide quality collaborative to work closely with the Illinois Regionalized Perinatal System on both obstetric and neonatal quality improvement.
- Dr. Borders also serves on the March of Dimes (MOD) Big 5 National Perinatal Quality Collaborative Executive Leadership Team and serves as the MOD Big 5 Illinois Team Lead. The MOD Big 5 is made up of the physicians, nurses and staff from the five states that represent 38 percent of births in the United States: Texas, California, Florida, New York and Illinois. The March of Dimes honored Dr. Borders in 2015 with the Jonas Salk Health Leadership Award for Chicago as a Public/Community Health Honoree. In 2016, she was also recognized with the Research Excellence Award for her work on maternal childhood trauma and cortisol during pregnancy by the Society for Maternal-Fetal Medicine.
- Our Division has continued its commitment to clinical and laboratory research, and a number of new projects have been developed during this past fiscal year. The Division currently has more than 15 active, IRB-approved clinical trials. These research efforts have resulted in numerous presentations at leading scientific research meetings and publications in leading peer-reviewed journals.
- In partnership with Northwestern University, we are one of only 14 clinical trial centers of the National Institute of Child Health and Human Development sponsored MFM Units Network. Our site is directed by Beth Plunkett, MD, MPH. The MFM Unit participation allows our patients access to the most innovative and important clinical trials. Recent studies have included a randomized placebo-controlled trial of antenatal late preterm steroids, randomized placebo-controlled trial in patients at risk for congenital cytomegalovirus infection, and a trial screening patients for hepatitis C to learn its natural history in pregnancy.

### Personalized Medicine to Avoid Preterm Delivery

**The NICHD-sponsored randomized clinical trial compared treatments in patients with twin pregnancies who had a shortened cervix to reduce preterm delivery. Since twin pregnancies with normal cervical length require less surveillance, this study is an important step in personalized medicine for women at risk of preterm delivery.**

# Reproductive Endocrinology and Infertility

## Clinical Mission and Services

NorthShore has 11 physicians who specialize in reproductive endocrinology and infertility (REI). These physicians are affiliated practitioners belonging to a variety of practice models. One of the most commonly encountered problems is infertility, which affects 8 to 10 percent of the population.

Over the last 30 years, great strides have been made in providing treatment for individuals and couples experiencing infertility. The repertoire of available treatments continues to expand as technology evolves in this dynamic field. The goal of treatment is a singleton live birth, and many recent advances have improved our ability to achieve this goal.

Fertility preservation, both for cancer patients and as a means to electively delay childbearing, has seen an increase in success. The advent of vitrification technology has revolutionized the ability to successfully freeze, warm and later fertilize an oocyte. After more than 1,500 babies were born without an observed increase in either congenital anomalies or chromosome abnormalities, the Society for Assisted Reproductive Technologies (SART) and the American Society for Reproductive Medicine (ASRM) declared that oocyte vitrification is no longer considered to be experimental.

## 2016 Highlights and Achievements

- Carolyn Coulam, MD, utilizes endometrial biopsies for immune profiling to help diagnose causes of recurrent implantation failure and recurrent pregnancy loss.
- NorthShore REI Division members make important contributions to the field as reviewers and editors for many of the specialty's major journals. Sigal Klipstein, MD, is a reviewer for the *Journal of Assisted Reproduction and Genetics* and *Fertility & Sterility*. Allison Rodgers, MD, serves as a reviewer for both *Human Reproduction* and *Fertility & Sterility*. Carolyn Coulam, MD, is a recognized expert in the field of reproductive medicine serving on more than a dozen scientific journals including *Human Reproduction*, *Fertility & Sterility*, *Reproductive BioMedicine Online*, *Journal of Assisted Reproduction and Genetics*, *American Journal of Reproductive Immunology* and the *Journal of Reproductive Immunology*.
- Educating the next generation of physicians is a priority for Division members. John Rinehart, MD, PhD, JD, and Drs. Allison Rodgers, Shweta Nayak and Sigal Klipstein serve as medical student lecturers and mentor students in the office setting. Drs. Rodgers and Nayak participate in the third-year medical students' Objective Structured Clinical Examination, to evaluate their ability to apply knowledge in the clinical environment. Dr. Nayak also partnered with Michael Hughey, MD, the Associate Site Director for NorthShore medical student rotations, to

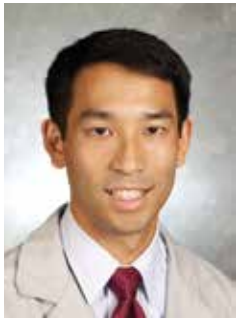
## Personalized Medicine to Achieve Single Live Births

**Comprehensive chromosome screening has enabled transfer of a single euploid embryo with high implantation and live birth rates. Further research is underway with the use of time-lapse imaging during embryo culture to learn if morphokinetic changes in the embryo can be used as a non-invasive means of achieving the same goal.**

develop online didactics on the topics of amenorrhea and the infertility evaluation. Dr. Carolyn Coulam lectured the Rosalind Franklin University Department of Physiology first-year medical students on "Infertility."

- The NorthShore subspecialists in REI also continue to make significant contributions to continuing education opportunities for physician colleagues. Dr. Shweta Nayak presented "Perinatal Morbidity and Assisted Reproductive Technology" at the NorthShore Department of Obstetrics and Gynecology Grand Rounds and on "Reproductive Aging and Oocyte Cryopreservation" at Presence Saint Francis Hospital Departments of Obstetrics and Gynecology and Internal Medicine Grand Rounds. Dr. Sigal Klipstein presented "Managing Conflicts Between Physician Autonomy and Patient Choice" at Beth Israel Deaconess/Harvard Medical School Grand Rounds. Dr. Carolyn Coulam has made significant contributions to continuing education in graduate and postgraduate courses, including the Reproductive Immunology Master Class of the South Florida Institute of Reproductive Medicine with lectures on "Recurrent Implantation Failure Causes, Diagnosis and Treatment."
- The regional, national and international communities benefit from the contributions of our REI specialists. Dr. Shweta Nayak has served our local community lecturing on "Oocyte Cryopreservation" to the members of the Junior League of Chicago. Dr. Allison Rodgers serves as the "Ask Dr. Rodgers" medical expert on the Beat Infertility website and their podcasts supporting women facing infertility. Dr. Sigal Klipstein serves as Chair of the Committee on Ethics for American Congress of Obstetricians and Gynecologists (ACOG). She is also a member of the Ethics Committee of the American Society for Reproductive Medicine and acts as the ACOG liaison to the American Academy of Pediatrics Committee on Bioethics and has co-authored numerous opinions related to ethics in reproductive medical care. Dr. Carolyn Coulam served as an abstract reviewer for selection of presentations at the annual meeting of the Society for Reproductive Investigation.

## Gynecological Pain and Minimally Invasive Surgery



**Frank Tu, MD, MPH**

*Division Director and  
Clinical Associate Professor*

### Clinical Mission and Services

The Division of Gynecological Pain and Minimally Invasive Surgery (GPMIS) brings the skills and experience of subspecialists in female pelvic pain disorders and laparoscopic surgery to the NorthShore clinical, academic and research community.

### 2016 Highlights and Achievements

- With three established clinicians, growth continued with a 5 percent overall increase in the Division productivity and patient access.
- Folabomi Oladosu, PhD, joined Kevin Hellman, PhD, as the first post-doctoral fellow in the Division. Dr. Oladosu came to NorthShore from the University of North Carolina after defending her thesis on opioid-induced hyperalgesia.
- Sangeeta Senapati, MD, MS, assumed leadership responsibilities at the NorthShore campus as Site Director for the Graduate Medical Education program under the direction of Anita Blanchard, MD, Obstetrics and Gynecology Residency Director at the University of Chicago Pritzker School of Medicine. She also continues to coordinate the surgical education of the University of Chicago residents. Dr. Senapati also is a member of the NorthShore Skokie Operating Room Committee.
- Members of the Division made numerous invited presentations regionally, nationally and globally. Dr. Senapati presented a discussion of the evidence of effective surgical treatments for chronic pelvic pain at the University of Chicago Department of Obstetrics and Gynecology Grand Rounds. She served as faculty for the American Congress of Obstetricians and Gynecologists ASSESS course on Assessing Your Skills with Simulated Vaginal and Laparoscopic Hysterectomy. Diana Atashroo, MD, spoke at Baystate Health's Department of Obstetrics and Gynecology on the medical and surgical considerations of pelvic pain and was faculty at the American Association of Gynecologic Laparoscopists' Workshop on Surgical Anatomy of the Pelvis and Procedures in Patients with Chronic Pelvic Pain. Frank Tu, MD, MPH, discussed Quality of Life Assessment at the NorthShore Research Institute Research Methods Seminar and chaired a topical workshop on Defining the Clinical Relevance of Autonomic Dysfunction to Visceral Pain States at the International Association for the Study of Pain in Yokohama, Japan.
- The GPMIS Division remained active with the AAGL Global Congress in 2016. Dr. Sangeeta Senapati gave a video presentation on functional phenotyping of menstrual pain and was faculty for the cadaver lab course on Laparoscopic Hysterectomy Made Ridiculously Simple. Dr. Frank Tu chaired a plenary session on Evidence-Based Medicine and served as faculty for the Specimen Extraction Workshop and the Postgraduate Program on Chronic Pelvic Pain Management.
- Dr. Diana Atashroo and Dr. Frank Tu served as faculty for the 2016 International Pelvic Pain Society (IPPS) cadaver lab in Chicago. Both were integral to activities of the IPPS membership committee which produced a series of patient-facing educational videos for the first time.
- Dr. Kevin Hellman continues mentoring high school, undergraduate, medical students and resident physicians in the GPMIS laboratory and taught in the "Scholarship and Discovery" course at the University of Chicago. Both a University of Chicago resident physician and medical student had poster presentations at the IPPS, under Dr. Hellman's supervision; Carolyn Kuhn, MD, presented functional-MRI of the uterus during spontaneous menstrual cramps; and Rebecca Zuckerman presented the psychological factors involved in cyclical and noncyclical pelvic pain. In collaboration with Rebecca Siltan, PhD, and Kelly Polnaszek of Loyola University of Chicago, research work from the GPMIS lab on neural correlates of sensory amplification was spotlighted with an oral presentation after the Presidential Symposium at the Society for Affective Science.
- Drs. Frank Tu and Kevin Hellman will soon enroll the 200th participant in their clinical trial of dysmenorrheal mechanisms, Chronic Pain Risk Associated with Menstrual Period Pain, or CRAMPP, supported by their National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) R01 grant.
- Dr. Frank Tu, as Co-Investigator and the Division of GPMIS, continues to collaborate on two NIDDK-funded studies of bladder pain syndrome (ICEPAC) with Thomas Chelimsky, MD, at the Medical College of Wisconsin and David Klumpp, PhD, at Northwestern University.
- Dr. Frank Tu served as an advisor for the National Institute of Child Health and Human Development Gynecological Health and Disorders Branch's Vision Meeting. He was also asked to serve as a grant reviewer for the NICHD study section for the Collaborative Research in Genomics, Epigenomics and Bioinformatics in Gynecologic Health and Disease. Dr. Kevin Hellman served as an international grant reviewer for FWF Der Wissenschaftsfonds (The Austrian Science Fund) and the United States-Israel Binational Science Foundation.
- Dr. Frank Tu served as guest editor for a special issue on benign gynecology in the *British Journal of Obstetrics and Gynaecology*. Included in that issue was a study from Drs. Tu and Hellman and Julia Kane validating a novel test for visceral pain under a prior National Institutes of Health-funded K23 study of pelvic floor pain. The identification of this noninvasive measure potentially can allow for population-based screening for women at risk for chronic pain disorders before they develop persistent symptoms. The same, special issue included a multisite randomized controlled clinical study by Drs. Senapati and Tu on vasopressin to reduce myomectomy-related bleeding.



## Urogynecology and Reconstructive Surgery



**Roger Goldberg, MD, MPH**

*Division Director and*

*Clinical Associate Professor*

### Clinical Mission and Services

The Division of Urogynecology and Reconstructive Surgery is dedicated to improving the care of women with incontinence, painful bladder syndrome, voiding dysfunction and other pelvic floor abnormalities. The Division is actively involved in the education of University of Chicago Pritzker School of Medicine residents and medical students and also continues an Accreditation Council for Graduate Medical Education-approved three-year Female Pelvic Medicine and Reconstructive Surgery fellowship. The physicians and clinical staff are recognized nationally as a premier resource for clinical care, research, informatics and quality outcomes tracking in urogynecology.

### 2016 Highlights and Achievements

- The physicians in the Division of Urogynecology and Reconstructive Surgery played a leading role in their specialty nationally and internationally. Roger Goldberg, MD, MPH, gave many international presentations in 2016. In Mexico, he presented on Anterior-Apical Mesh and Abdominal Sacrocolpopexy at the XXVII Congreso Nacional de Urología Ginecológica for the Sociedad Mexicana de Urología Ginecológica. As a visiting surgeon and lecturer, he presented on vaginal mesh and prolapse repair at the Chirurgische Klinik München-Bogenhausen in Germany. In Taiwan, he was a visiting surgeon and professor at the Kaohsiung Medical University Hospital and the China Medical University Hospital and lectured on innovations in vaginal prolapse surgery at the Taiwan Urogynecology Society.
- Peter Sand, MD, as Director of Research for the Division, is Principal Investigator for several new and ongoing studies, including the novel use of periurethral myoblast injection for the nonsurgical treatment of stress urinary incontinence. His research endeavors have presented many opportunities to share his findings at numerous Grand Rounds globally.
- Sylvia Botros, MD, MSCI, was promoted to the rank of Clinical Associate Professor by the University of Chicago Pritzker School of Medicine. She also completed the Medical Education Research, Innovation, Teaching and Scholarship (MERITS) fellowship through the University of Chicago. This highly competitive program provides scholars with the conceptual and practical skills for successful careers in medical education. Dr. Botros was also elected Treasurer for the International Urogynecological Association (IUGA). Her national and international service extended to lecturing at the American Urogynecologic Society (AUGS) in Texas and at the King Hamad University Hospital for the IUGA eXchange program in Bahrain.
- Janet Tomezsko, MD, contributes her expertise on the NorthShore Operating Room Committee and served on a medical mission to Bolivia. She also serves as Vice Chair on the NorthShore Quality Committee. She contributes to the professional community serving on the AUGS Coding Committee and as the AUGS liaison to the American Congress of Obstetricians and Gynecologists' Health Economics and Coding Committee.
- Dr. Roger Goldberg was featured in a live satellite broadcasted telesurgery to the entire membership of the AUGS at the Annual Meeting. Dr. Goldberg demonstrated a surgical technique developed at NorthShore.
- Adam Gafni-Kane, MD, was appointed Vice Chair of the NorthShore Patient Engagement Committee. As the newest member of the Division, he has dramatically expanded the geography and patient population of the group.
- Dr. Roger Goldberg and the Division of Urogynecology were awarded the NorthShore Medical Group Obstetrics and Gynecology Innovation Grant for their project to develop and implement the NorthShore Women's Health Cross Screen. This questionnaire is designed to gather input related to several specialties related to conditions and symptoms that can severely impact overall health and quality of life for women. The patient responses are expected to enable the physicians to initiate conversations and recommend care pathways that improve patient outcomes and overall patient experience.



## NorthShore Perinatal Center



**Scott MacGregor, DO**  
Co-Director



**William MacKendrick, MD**  
Co-Director

### Clinical Mission and Services

The NorthShore Perinatal Center is one of 10 regional perinatal centers in Illinois and is supported by federal and state grants. This system was created to provide quality maternal-fetal and neonatal care services to the families in all regions of Illinois. Currently, our perinatal program serves eight referral hospitals within the north and west suburbs by promoting professional collaboration, consultation and communication to improve the health of pregnant women and their babies within the multiple communities we serve. The NorthShore Perinatal Center is led by Co-Directors Scott MacGregor, DO, for Maternal-Fetal Medicine (MFM) and William MacKendrick, MD, for Neonatology and administered by Myra Sabini, RNC-OB.

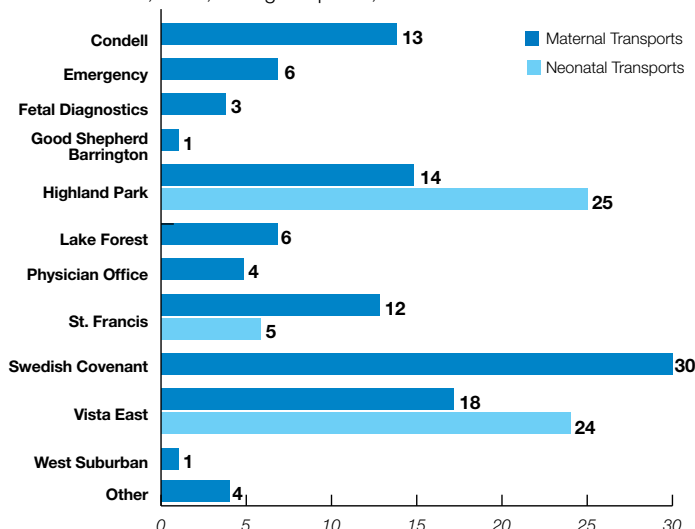
### 2016 Highlights and Achievements

The NorthShore Perinatal Center:

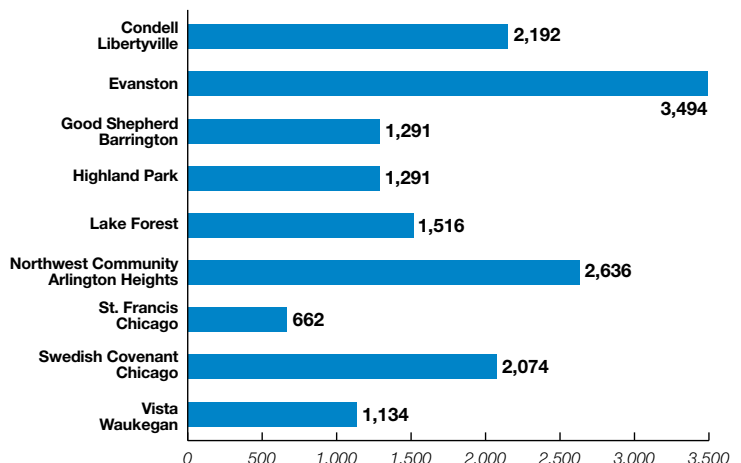
- Collaborates with referring hospitals for high-risk management and acceptance of maternal and neonatal transports. In 2016, Evanston Hospital accepted 112 maternal and 54 neonatal transports. Referring hospitals support more than 16,000 delivered women—the largest percentage of delivery volume within the Illinois Perinatal Program.
- Acts as a liaison and resource to the hospital and to the community by supporting network activities to meet perinatal grant rules and guidelines thus adding value, expertise and quality to non-NorthShore practices across Northern Illinois.
- Provides 24-hour tertiary center obstetrical and neonatal consultation to increase early identification of maternal-fetal and neonatal problems and to expedite consultation/referral to NorthShore tertiary care, as needed.
- Coordinates professional educational opportunities and courses for obstetric and neonatal physicians and nurses, which include courses in Perinatal Loss and Depression, Fetal Monitoring, Neonatal Stabilization and Hemorrhage Management. The Grainger Center for Simulation and Innovation (GCSI) makes additional multidisciplinary, collaborative education possible. NorthShore subspecialist physicians and staff led 42 case review meetings focused on education and evidence-based research in GCSI.
- Supports The Illinois Perinatal Quality Collaborative (see *Maternal-Fetal Medicine* page 3) initiatives, many of which are rolled out through the Illinois Perinatal Program.
- Monitors and collects data for the Illinois Department of Public Health (IDPH) for perinatal indicators of quality care, such as fetal, neonatal and maternal mortality rates; caesarian section rates; delivery volumes; low birth rates; and maternal and neonatal transport volumes. In addition, the Perinatal Center collects and submits state-required reports of metabolic newborn screens, newborn hearing screens, HIV infection and adverse outcomes via the Adverse Pregnancy Outcomes Reporting System.
- Provides essential support for IDPH triennial site visits. Each hospital's resources and services are reviewed to maintain the level of care designation as determined by the Perinatal 640 Rule. For Evanston Hospital, the latest IDPH review resulted in no recommendations for improvement and the designation of **exceptional** Level III Perinatal Center.

### Maternal and neonatal transports to Evanston Hospital

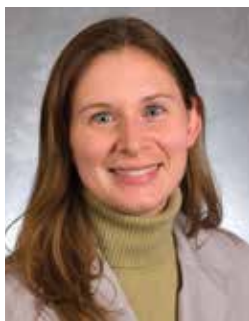
Fiscal Year Oct. 1, 2015, through Sept. 30, 2016



### Delivery volume by hospital within the perinatal network



## Perinatal Depression Program



**Jo Kim, PhD**

Program Director and  
Clinical Assistant Professor

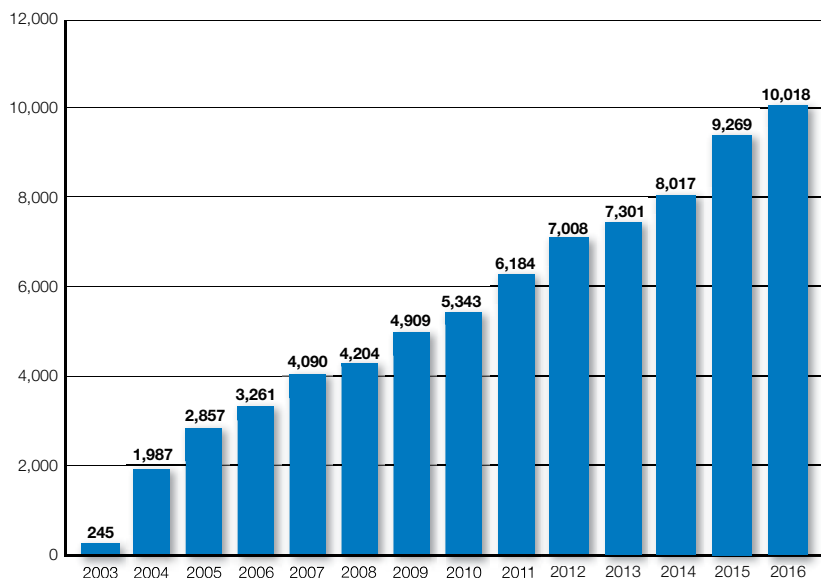
### Clinical Mission and Services

Women are at greatly increased risk for clinical depression and its potentially devastating outcomes during the perinatal period. The Perinatal Depression Program (PDP) provides proactive universal screening for depression in both the pre- and postnatal periods using the Edinburgh Postnatal Depression Scale (EPDS). The program also provides an immediate, live telephone response to at-risk women by a trained and licensed professional 24/7/365 for information, advice or referral to an appropriate mental health provider.

### 2016 Achievements

- 10,018 depression and anxiety screens were administered, the highest volume in the program's history.
- 598 depression screens triggered a clinical response for indications of women at risk, and 199 (33 percent) of those endorsed thoughts of self-harm.

### Depression and Anxiety Screening Calls by Volume



- 1,015 calls were made to the MOMS Perinatal Depression Hotline.
- 30 callers were referred for emergency services based on acuity.
- PDP facilitated the swift referral of 62 women to Marley Doyle, MD, a reproductive psychiatrist. In her second year in the role of PDP Medical Director, her expertise is in high demand.
- Two pilot studies on computer adaptive testing for perinatal depression, anxiety, mania and suicide were completed. PDP collaborated with University of Chicago researcher Robert Gibbons, PhD.
- The PDP team and Department colleagues had many scientific achievements in 2016. *Archives of Women's Mental Health* published an article by Jo Kim, PhD, Richard Silver, MD, et al on "The experience of depression, anxiety and mania among perinatal women." Drs. Kim and Silver presented their poster on Persistence of Depression and Suicide Risk Within and Across Pregnancies at the Annual Clinical and Scientific Meeting of the American Congress of Obstetricians and Gynecologists, Washington, D.C. Additionally, *The Lancet Psychiatry* invited them to provide commentary on *Suicide in perinatal and nonperinatal women in contact with psychiatric services: 15-year findings from a UK national inquiry* by Hind Khalifeh, MD, PhD, MSc, et al.
- The American Psychological Association invited Dr. Jo Kim to present a half-day workshop on perinatal mood disorders at their Annual Convention in Denver.
- For the sixth year, the Illinois Department of Human Services (DHS) provided additional funding to NorthShore's 24/7 Perinatal Depression Hotline (866-364-MOMS), which enable the hotline to provide immediate clinical support to women and families throughout Illinois.
- Muneer Satter and Kristin Hertel committed to a generous three-year funding grant to support mobile health initiatives related to perinatal mood disorders for both detection and treatment.
- In recognition of Perinatal Depression Awareness Month in May, PDP hosted a film screening and panel discussion featuring the highly acclaimed documentary *The Dark Side of the Full Moon*. As a result, the Department and the program earned high praise from the film's director, Maureen Fura:
 

*Thank you so much for an amazing screening. It was honestly one of my favorites. I was so taken aback at how much your team is doing but also how humble everyone was. You are doing it better than anyone I have seen and yet, I heard you all talking about how much more there is to do. I have heard from some people the opposite. That they have solved the problem and then someone in the audience reminds them of how far they still need to go. With you guys, it was the opposite.*

# Perinatal Family Support Center

## Clinical Mission and Services

The Perinatal Family Support Center (PFSC) provides a wide array of clinical services for patients and their families receiving obstetrical and pediatric care at NorthShore.

## 2016 Highlights and Achievements

- 1,635 families received services from PFSC in fiscal year 2016.
- The top five reasons for initial referral to PFSC:

Reason	Percentage
Mental health issues	<b>37.9%</b>
High-risk pregnancies	<b>11.7%</b>
Pregnancies losses	<b>11.0%</b>
Infant Special Care Unit (ISCU) admissions	<b>7.8%</b>
Maternal medical conditions	<b>4.5%</b>

- Four five-week sessions of the Teen Education program (The ABCs of Pregnancy and Parenting) provided anticipatory guidance and developmentally appropriate education to pregnant teens and their support person with an ongoing goal of fostering healthy outcomes. Twenty-four of the 88 pregnant teens referred to PFSC elected to participate in this free program.
- 89 antenatal consults with Neonatology were performed in anticipation of support, guidance and resource needs of obstetric patients whose unborn child was diagnosed with a significant fetal anomaly.
- PFSC initiated a weekly drop-in Infant Special Care Unit (ISCU) parent support group facilitated by a staff member. This opportunity to share with others experiencing similar circumstances was in response to parents' requests for additional support, and to promote connection between families while their babies are in the ISCU.
- Beginning in September, ISCU families whose baby has an extended length of stay receive free parking. PFSC recognized this benefit as a way to alleviate one significant stressor in the challenges facing ISCU families.
- PFSC implements a special discharge plan for families assessed to be at high risk with the goal of fostering safe transition to the community for infants and children. This planning promotes stable transition to parenting as well as appropriate medical follow-up for their children. Most families who participate demonstrate excellent outcomes.

- 514 families or patients were provided with needs-based support with the assistance of the NorthShore Associate Board Emergency Family Fund.
- The Auxiliary of NorthShore collected and donated several thousand disposable diapers to PFSC staff for distribution to under-resourced families.
- For the eighth consecutive year, PFSC partnered with the Junior League of Evanston-North Shore enabling an education and advocacy "Baby Shower" for 15 low-income pregnant women and their guests in April.
- PFSC received a Small Project Funding grant from The Auxiliary of NorthShore to purchase books about perinatal mood disorders. These two books are now distributed to patients who have limited access to community mental health support/services. The books provide information about common mood issues in the perinatal period and outline strategies for patients and their families to implement on their own.

To maintain and improve professional competency and excellent patient care, PFSC staff attended training by outside providers in the following areas:

- Racial Disproportionality in Child Welfare
- Domestic Violence in Immigrant Communities
- Sensorimotor Psychotherapy Level 1 Training: Affect Dysregulation, Survival Defenses and Traumatic Memory
- Assessment and Treatment of Postpartum Mood and Anxiety Disorders
- Assessing and Addressing Human Trafficking in a Healthcare Setting (federal training)
- Working with Sexual Abuse Survivors: Considerations for Perinatal Care
- Intervention Strategies for Health Care Providers: Working with Patients Who Are Perpetrators of Violence
- LGBTQ Competency in Healthcare
- Midwest LGBTQ Healthcare Symposium
- *Dark Side of the Full Moon*: Film Screen and Panel Discussion
- Honoring the Birth Mother's Wishes (when an adoption plan is considered)
- Cultural Diversity—End-of-Life Considerations

# Innovation in Women's Healthcare

## Prenatal Genetic Diagnosis

**Innovation for today**—A team of outstanding genetic counselors in collaboration with our maternal-fetal medicine specialists care for expectant parents to determine the most appropriate screening and diagnostic testing to ensure a safe outcome for pregnancies. This involves assessment of inherited risk that focuses on family history, environmental factors and medication exposures as well as past reproductive outcomes to determine the general concerns going forward.

**Innovation for tomorrow**—We are transitioning to a comprehensive, personalized approach to an individual woman and her pregnancy that includes study of fetal DNA that circulates in the maternal bloodstream and can be detected and evaluated a mere two to three months into a pregnancy. Complementing this approach is the high-resolution ultrasound that can evaluate both genetic and structural fetal problems in order to best prepare for prenatal care, delivery and the newborn course.

## Maternal Depression Treatment

**Innovation for today**—Our pioneering Perinatal Depression Program, now in its thirteenth year, has screened more than 75,000 women and provided a critical patient safety net that includes a 24/7/365 hotline jointly sponsored by NorthShore and the State of Illinois (processing more than 8,000 calls to date!) and an available network of community-based mental health services for at-risk women. The program is a national model that combines excellent clinical care and works to aggressively disseminate best practices for mental health services.

**Innovation for tomorrow**—In collaboration with University of Chicago biostatistician Robert Gibbons, PhD, and University of Oregon e-health expert Brian Danaher, PhD, we will soon deploy an innovative computerized adaptive test for depression and anxiety screening as well as an effective multimodal web-based treatment program. Both tools will be seamlessly delivered to patients via smartphone, tablet or computer, overcoming many evaluation and care barriers with minimal patient burden and greater patient engagement/satisfaction.

## Innovative Obstetrical Research

**Innovation for today**—Now in our third five-year cycle as a member of the National Institutes of Health Maternal-Fetal Medicine Units (MFMU) network, described as “clinical centers representing premier institutions in perinatal medicine with track records of excellence in clinical research,” we routinely deploy treatments that have transformed our current practice of obstetrics, including the maternal injection of progesterone to prevent preterm delivery—and for those women in which preterm birth is inevitable, administration of magnesium sulfate to prevent newborn cerebral palsy.

**Innovation for tomorrow**—In 2016, results of the “Antenatal Betamethasone for Women at Risk for Late Preterm Delivery” study resulted in game-changing publications and new guidelines from the American Congress of Obstetricians and Gynecologists (ACOG) Practice Advisory. NorthShore's maternal-fetal medicine specialist Dr. Ann Borders helped create ACOG's Practice Advisory, directing a steroid (betamethasone) course for women at risk of late preterm delivery, which was shown to even help babies born between 34 and 36 weeks avoid respiratory complications similar to babies born with greater degrees of prematurity.



## Caring for Underserved Women

**Innovation for today**—Dr. Ann Borders led two National Institutes of Health studies entitled Measures of Maternal Stress Study (MOMS) and the Stress, Pregnancy & Health Study (SPAH). These studies are improving our understanding of the biological mechanisms, especially chronic inflammation, that connect stressful experiences that occur before and during pregnancy with the risk for preterm delivery. This research is designed to understand these biological pathways and ultimately reduce risk among the most vulnerable populations. Currently, our NorthShore Community Health Center (NCHC) provides routine prenatal care for hundreds of women who are underserved and thus at risk. We use the resources provided as part of our teaching programs to maximize traditional aspects of prenatal and hospital-based care for these families.

**Innovation for tomorrow**—The future for pregnant women at NorthShore who have accumulated stress in their lives and retain a highly vulnerable pregnancy risk profile will be met by new methods of support and care. “Pregnancy centering” and “group prenatal care” (both being studied as risk-reducing strategies to improve pregnancy outcome). The addition of generous grants (March of Dimes and North Suburban Healthcare Foundation) have funded a robust breastfeeding peer counselor community program just under way to provide breastfeeding peer counselors—who are particularly effective with low-income women who typically have lower rates of breastfeeding success. This strategy reduces stress and confers tangible health benefits for women and children.

## Women’s Cancer Care

**Innovation for today**—For more than a decade, the Division of Gynecologic Oncology at NorthShore has studied the molecular biology of gynecologic cancers. Their treatments remain leading edge (personalized surgical and medical therapy, including selected application of robotic surgical technology and the latest chemotherapeutic clinical trials via membership in the national Gynecologic Oncology Group [GOG] Trials). Patients come from outside the NorthShore geography to NorthShore’s Kellogg Cancer Center for expert gynecologic oncology care, especially those who have not succeeded or have had recurrences after prior treatments.

**Innovation for tomorrow**—The translation of basic science research to the clinic will soon “personalize” a multi-pronged approach to the prevention of ovarian and endometrial cancers. Led by Gynecologic Oncology Division Head Gustavo Rodriguez, MD, he will be identifying those women at highest risk and offering them both medical and surgical interventions to mitigate risk. Birth control pills/progesterone, vitamin D, and non-steroidal antiinflammatory drugs all showing promise as cancer preventives. As obesity and metabolic factors are known to increase risk for endometrial cancer, lifestyle and weight-loss interventions can play an additional role in prevention.

## Women’s Pelvic Health

**Innovation for today**—Our Pelvic Health Center consists of urogynecologists, minimally invasive gynecologic surgeons and pelvic pain specialists as well as physical therapists and colorectal surgeons. An extensive screening questionnaire has been piloted in gynecologic offices that explores a broad range of issues (incontinence, pelvic support and pain, and abnormal bleeding) to ensure that serious conditions (that women are reluctant to report) are brought to their doctors’ attention. The initial experience with this patient-facing strategy has been very favorable.

**Innovation for tomorrow**—The application of the Pelvic Health questionnaire across all primary care office sites during all relevant encounters for the women who seek care at NorthShore is an audacious goal that is already supported by the survey’s integration into Epic (NorthShore’s Electronic Medical Record [EMR] system). This will allow the primary care physicians the option of either evaluating these concerns directly or seamlessly referring women to expert specialists in our Department. It is estimated that 60 to 80 percent of women with these concerns could have their care facilitated by this personalized strategy.

## Undergraduate Medical Education



**H. Jacob Saleh, MD**

*Site Director and Clinical  
Associate Professor*



**Michael Hughey, MD**

*Associate Site Director and  
Senior Clinician Educator*

### Overview

In collaboration with the University of Chicago Pritzker School of Medicine, NorthShore faculty continues its commitment to ongoing excellence in undergraduate medical education. Students complete learning objectives in healthcare for women in an atmosphere of discovery and clinical excellence.

In addition to the core third-year rotation, fourth-year students are offered unique month-long electives in general and high-risk obstetrics. Electives include subspecialty experience in urogynecology, gynecologic oncology, fertility and pelvic pain. A number of senior students with a strong interest in postgraduate training from medical schools across the United States matriculated at NorthShore.

### 2016 Highlights and Achievements

- H. Jacob Saleh, MD, and David Ouyang, MD, were recipients of the Holden K. Farrar, Jr., MD, Teacher of the Year Award and Lecturer of the Year Award, respectively.
- Michael Hughey, MD, Associate Site Director for Undergraduate Medical Education, has continued to develop simulation training programs and he administered the Objective Structured Clinical Exam (OSCE). New training modules have been deployed in both the Grainger Center for Simulation and Innovation and online to enhance student learning opportunities.
- Standardized patients were included in the year-three curriculum for the first time in 2016. This interactive learning opportunity uses live patient-actors for clinical learning. The authentic simulation, as well as the immediate feedback with standardized patients, has been very well received by the students. Expanding this opportunity to advanced simulation labs and the OSCE is a goal for the coming year.
- Continuous improvement is the guiding principle in the evolution of the NorthShore rotation with the goal of optimizing the learner experience and meeting all educational objectives. In response to student feedback, data collected over the past academic year has concentrated efforts in the areas of faculty development, mentor program expansion and didactic lecture schedule improvements. Incorporating case-based learning in the didactic schedule was a noteworthy improvement and was informed by student feedback. The program has benefited from lecturers new to the schedule, in addition to William Banzhaf, MD, resuming participation. Dr. Banzhaf has a history as a perennial “Best Lecture” winner, and his involvement is a great benefit to students and the educational mission.
- Dr. Michael Hughey, Dr. H. Jacob Saleh and Sabrina Holmquist, MD, MPH, University of Chicago Obstetrics and Gynecology Clerkship Director, will present their research poster based on data collection from the OSCE at the Council on Resident Education in Obstetrics and Gynecology and APGO 2017 joint Annual Meeting.
- With continued emphasis on hands-on training, a full day of ultrasound education allows students to participate in ongoing data-driven research by NorthShore faculty to quantitatively assess the effectiveness of their training in this discipline.

## Graduate Medical Education



**Sangeeta Senapati, MD, MS**

Site Director and  
Clinical Assistant Professor



**Barrett Robinson, MD, MPH**

Associate Site Director and  
Clinical Assistant Professor

### Overview

All 28 of the University of Chicago Pritzker School of Medicine OB/GYN residents benefit from learning opportunities at NorthShore over their four-year training program. Under the leadership of Anita Blanchard, MD, Obstetrics and Gynecology Residency Director, at University of Chicago Pritzker School of Medicine, NorthShore and Pritzker provide the breadth and depth of graduate medical education at both campuses. NorthShore also hosts residents from Saint Francis Hospital's Obstetrics and Gynecology residency training program, which allows for one resident to participate in our Labor and Delivery team throughout the academic year. The University of Chicago residents' obstetrics and gynecology outpatient clinic training is based at the NorthShore Community Health Center. This experience gives residents the opportunity to learn outpatient management within the context of a "group practice."

### 2016 Highlights and Achievements

- Members of our OB/GYN faculty are routinely recognized for their remarkable teaching abilities. NorthShore physician Beth Plunkett, MD, MPH, was recognized by the Obstetrics and Gynecology residents for her talent and dedication to graduate medical education as the recipient of the Golden Apple Award. She was also recognized by the medical students as a faculty honoree at the prestigious Alpha Omega Alpha Honor Medical Society ceremony. Jeffery Lerch, MD, was honored by the Family Medicine residents with the Outstanding Community Preceptor Award.
- The residents received several important accolades this year. Golden Apple Awards were received by Benjamin Brown, MD (Class of 2016), John Byrne, MD (Class of 2017), Robert Scholz, MD (Class of 2018), and Katherine Laus, MD (Class of 2019). The medical students recognized Iman Alsaden, MD (Class of 2018) with the Excellence Award in Medical Student Teaching.
- The resident research projects are representative of the extensive scope of research at both NorthShore and the University of Chicago and the combined faculty commitment to mentor learners in their academic endeavors. Our residents presented their published research work at numerous national meetings:
  - Julia Fehniger, MD, under the mentorship of Diane Yamada, MD\*, and Ernst Lengyl, MD, PhD\*, presented "Ovarian cancer patients treated with intraperitoneal/intravenous (IP/IV) chemotherapy do not experience increased toxicity at recurrence" and

"Clinical utility of routine postoperative laboratory studies in uncomplicated patients undergoing robotic hysterectomy for endometrial cancer" at the Society of Gynecologic Oncology Annual Meeting on Women's Cancer.

- John Byrne, MD, under the mentorship of Julie Chor, MD\*, presented his work on "Evaluation of Ethics Education in Ob-Gyn: A Survey of Resident Physicians" at the Association of Professors of Gynecology and Obstetrics/Council on Resident Education in Obstetrics and Gynecology Annual Meeting.
- Joana Lopes Perdigao, MD, under the mentorship of David Ouyang, MD\*\*, published her work on "Perinatal and obstetric outcomes of dichorionic vs. trichorionic triplet pregnancies" in the *American Journal of Obstetrics & Gynecology*.
- Kathryn Mills, MD, under the mentorship of Jean Hurteau, MD\*\*, published her research on "Association of Metformin Use with Outcomes in Advanced Endometrial Cancer Treated with Chemotherapy" in *PLoS One*.
- Benjamin Brown, MD, under the mentorship of Sabrina Holmquist, MD, MPH\*, presented "Feedback: The Breakfast (Club) of Champions: Empowering Residents to Identify and Manage Challenging Learners" at the Association of Professors of Gynecology and Obstetrics' Martin L. Stone, MD, Faculty Development Seminar.
- Julia Simon, MD, under the mentorship of Diane Yamada, MD\*, presented "Narrative Medicine and the OB/GYN Housestaff Experience" at the Association of Professors of Gynecology and Obstetrics/Council on Resident Education in Obstetrics and Gynecology Annual Meeting.
- Lopa Pandya, MD, and Dana Elborn, MD, worked under the mentorship of Julia Chor, MD\*, to present their research on "Case Report: Pelvic actinomyces in an adolescent with imperforate hymen" at the North American Society of Pediatrics and Adolescent Gynecology, which was published in the *Journal of Pediatric & Adolescent Gynecology*.
- Ian Grable, MD, MPH, Clinical Associate Professor in Maternal-Fetal Medicine, and his colleagues continued to provide cutting-edge educational opportunities for the residents through his use of simulation technology in the state-of-the-art Grainger Center for Simulation and Innovation (GCSI) at NorthShore. His educational program provided intensive training for the residents in such areas as complex deliveries, ultrasound skills, team building, obstetric emergencies, patient counseling and management of medically complex situations. Similarly, Sangeeta Senapati, MD, MS, and colleagues provided the residents with high-impact gynecologic training at the GCSI with a focus on advanced minimally invasive surgical skills and techniques in the safety of the simulated learning environment.

\* University of Chicago Pritzker School of Medicine faculty

\*\* NorthShore University HealthSystem faculty

## Fellowship Programs



**Sylvia Botros, MD, MSCI**  
Program Director and  
Clinical Assistant Professor

### Female Pelvic Medicine and Reconstructive Surgery (formerly known as Urogynecology)

#### Overview

The Division of Female Pelvic Medicine and Reconstructive Surgery (FPMRS) supports the advanced training for three fellowship positions certified by the Accreditation Council for Graduate Medical Education (ACGME). The highly regarded national reputation of the NorthShore FPMRS fellowship program was instrumental in matching with top-tier applicants again in 2016 for the fifteenth consecutive year. The program includes training on pelvic surgery, urinary incontinence, pelvic organ prolapse and pelvic health conditions with integrated clinical rotations at the University of Chicago.

#### 2016 Highlights and Achievements

- Recently graduated fellow Alexis Tran, DO, accepted a faculty position at the Albany Medical Center in the Department of Obstetrics and Gynecology as an FPMRS subspecialist. She has presented several oral presentations at national and international meetings and has several publications as a result of her work during her fellowship.
- Shilpa Iyer, MD, has chosen to study the effect of anticholinergic medications on cognitive function for her thesis work and is mentored by Dr. Roger Goldberg. She presented both nationally and internationally, has had one of her manuscripts published and has a second one pending revisions.
- Carolyn Botros, DO, has chosen to study the use of Hiprex compared to trimethoprim in the prevention of recurrent urinary tract infections for her research thesis. Dr. Botros has also presented her work at both national and international meetings.
- Svetlana Lozo, MD, our new first-year fellow, started the FPMRS fellowship program after completing her Global Health Innovations and Leadership fellowship from Massachusetts General Hospital Division of Global Health and Human Rights. Prior to that, Dr. Lozo completed residency training in obstetrics and gynecology at Maimonides Medical Center. We welcome her wholeheartedly.



**Jean Hurteau, MD**  
Associate Program Director and  
Clinical Professor

### Gynecologic Oncology

#### Overview

The Division of Gynecologic Oncology partners in an approved, integrated fellowship training program with the University of Chicago. Rebecca Brooks, MD, Associate Professor of Obstetrics and Gynecology, succeeded Diana Yamada, MD, as Gynecologic Oncology Fellowship Program Director. The fellowship is accredited by the American Board of Obstetrics and Gynecology and consists of one basic science research year and two clinical years divided between the NorthShore University HealthSystem and University of Chicago campuses. The clinical experience includes management of preinvasive and complex invasive cancers of the gynecological tract under the supervision of nine attending physicians, with both surgical and medical oncology as central components of the curriculum.

#### 2016 Highlights and Achievements

- Collectively, our fellows had six poster presentations at national meetings in 2016. Also included are three manuscript publications in prestigious journals and six other manuscripts in preparation.
- Terri Febbraro, MD, was our fourth fellow to complete and graduate from the fellowship program. Dr. Febbraro is currently practicing in the Division of Gynecologic Oncology at Westchester Medical Center in Hawthorne, New York. Prior to her fellowship training, she completed her residency training at Brown University and her medical degree at Albert Einstein College of Medicine in New York.
  - Josephine Kim, MD, began the final year of the fellowship after completing her laboratory and first clinical years. Dr. Kim earned her medical degree at the University of Chicago and completed her residency training at the University of California-San Diego.
  - Jerlinda Ross, MD, MS is now entering the first of two clinical years of fellowship after completing a research year focusing on healthcare disparities in gynecologic oncology. Dr. Ross completed residency training at Indiana University School of Medicine and earned her medical degree from Duke University.
  - Claire Hoppenot, MD, is the newest fellow in our program. Dr. Hoppenot earned her medical degree at Thomas Jefferson University in Philadelphia and completed her residency training at Northwestern University. She is currently starting a medical ethics fellowship through the MacLean Center for Clinical Medical Ethics that will run concurrently with her research year. She will join Ernst Lengyel, MD, PhD, Professor of Obstetrics and Gynecology, in his ovarian cancer research lab as well.
  - Dr. Jerlinda Ross was invited to present her abstract on "Endometrial cancer survivors' access to recommended self-care resources to target obesity in a high poverty urban community" at the Society of Gynecologic Oncology 2017 Annual Meeting on Women's Cancer.

### Department of Obstetrics and Gynecology 2016 Fellows

**Carolyn Botros, DO**  
Urogynecology

**Lena Braginsky, MD**  
Maternal-Fetal Medicine

**Claire Hoppenot, MD**  
Gynecologic Oncology

**Shilpa Iyer, MD, MPH**  
Urogynecology

**Josephine Kim, MD**  
Gynecologic Oncology

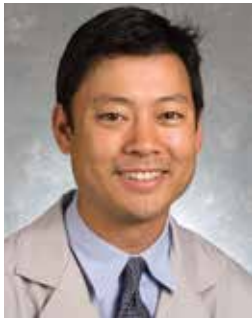
**Svetlana Lozo, MD**  
Urogynecology

**Jerlinda Ross, MD, MS**  
Gynecologic Oncology

**Patrick Schneider, MD**  
Maternal-Fetal Medicine

**Amanda Stephens, MD**  
Maternal-Fetal Medicine





**David Ouyang, MD**  
*Program Director and  
 Clinical Associate Professor*

## Maternal-Fetal Medicine

### Overview

The integrated NorthShore and University of Chicago Maternal-Fetal Medicine (MFM) fellowship has fully developed the training experience in the care of women with high-risk pregnancies for all three of its fellows. During the three-year program, the fellows benefit from dividing their time and activities equally at NorthShore and the University of Chicago under the supervision and mentorship of 16 board-certified faculty members. They spend approximately two years in clinical rotations where they refine their ability to manage complex pregnancies and develop proficiency and expertise in ultrasound and antenatal diagnosis, including procedural skills such as amniocentesis and chorionic villus sampling. Additionally, the fellows devote at least one year to clinical and/or basic science research activity with faculty mentorship.

### 2016 Highlights and Achievements

- Edom Yared, MD, successfully defended her thesis titled “Effect of body mass index on perinatal outcomes in an urban population” under the mentorship of Sarosh Rana, MD, Section Chief of MFM at the University of Chicago, and returned to practice in her home state of Maryland.
- Alicia McCarthy, MD, PhD, successfully defended her thesis titled “Association between antihypertensive therapy and postpartum depression” under the mentorship of Beth Plunkett, MD, MPH, of the NorthShore MFM Division. She joined a blended academic/private practice position outside of San Francisco with a Kaiser Permanente Maternal-Fetal Medicine group.
- Amanda Stephens, MD, our third-year fellow, is on track to not only defend her fellowship thesis under the mentorship of David Ouyang, MD, but also complete her Master of Science graduate degree from the University of Chicago’s Department of Health Studies. She plans to join the faculty at the University of Missouri following her graduation.
- Patrick Schneider, MD, is our second-year fellow and has been actively engaged in the NorthShore Quality and Patient Safety Fellowship Program with Division member Ann Borders, MD, MSc, MPH, acting as his practicum mentor. In conjunction with his Quality fellowship and involvement with the Illinois Perinatal Quality Collaborative, he has been working to identify system errors and implement potential systems solutions to reduce severe maternal morbidity that can effect women with severe range hypertension.
- Lena Braginsky, MD, is our first-year fellow who has taken on the challenging task of conducting a randomized controlled trial comparing the use of tissue adhesive versus butterfly closures for cesarean wound closure to potentially reduce infection and wound disruption. Her mentor is Dr. Beth Plunkett of the NorthShore MFM Division.

# 2016 Clinical Research Studies

## DIVISION OF GYNECOLOGIC ONCOLOGY

Investigator	Clinical Trial	Sponsor
Diaz Moore	Evaluation of Clinical Outcomes in Ovarian Cancer Patients Undergoing Variable Numbers of Postoperative Chemotherapy Cycles Following Neoadjuvant Chemotherapy and Interval Cytoreductive Surgery	NorthShore
Diaz Moore	The Impact that Duration of Time on Chemotherapy Has on Survival in Recurrent Ovarian Cancer	NorthShore
Diaz Moore	Venous Thrombosis in Patients Receiving Extended Pharmacologic Prophylaxis Following Minimally Invasive Surgery for Endometrial Cancer	NorthShore
Hurteau	GOG 0210: A Molecular Staging Study of Endometrial Carcinoma	NorthShore
Hurteau	GOG 0238: A Randomized Trial of Pelvic Irradiation With or Without Concurrent Weekly Cisplatin in Patients With Pelvic-Only Recurrence of Carcinoma of the Uterine Corpus	NorthShore
Hurteau	GOG 0258: A Randomized Phase III Trial of Cisplatin and Tumor Volume Directed Irradiation Followed by Carboplatin and Paclitaxel vs. Carboplatin and Paclitaxel for Optimally Debulked, Advanced Endometrial Carcinoma	NorthShore
Hurteau	GOG 0264: A Randomized Phase II Trial of Paclitaxel and Carboplatin vs. Bleomycin, Etoposide and Cisplatin for Newly Diagnosed Advanced Stage and Recurrent Chemo-naïve Sex-Cord Stromal Tumors	NRG Oncology
Hurteau	GOG 0274: A Phase III Trial of Adjuvant Chemotherapy as Primary Treatment for Locally Advanced Cervical Cancer Compared to Chemoradiation Alone: The Outback Trial (ANZGOG 0902/GOG-0274/RTOG 1174)	NorthShore
Hurteau	GOG 0281: A Randomized Phase II/III Study to Assess the Efficacy of Trametinib (GSK 1120212) in Patients with Recurrent or Progressive Low-Grade Serous Ovarian or Peritoneal Cancer	NRG Oncology
Hurteau	GOG 0286B: A Randomized Phase II/III Study of Paclitaxel/Carboplatin/Metformin (NSC#91485) vs. Paclitaxel/Carboplatin/Placebo as Initial Therapy for Measurable Stage III or IVB, or Recurrent Endometrial Cancer	NRG Oncology
Hurteau	GOG 3005/AbbVie M13-694: A Phase III Placebo-Controlled Study of Carboplatin/Paclitaxel With or Without Concurrent and Continuation Maintenance Veliparib (PARP Inhibitor) in Subjects With Previously Untreated Stages II or IV High-Grade Serous Epithelial Ovarian, Fallopian Tube or Primary Peritoneal Cancer	NRG/AbbVie
Hurteau	NRG-GY005: A Randomized Phase II/III Study of the Combination of Cediranib and Olaparib Compared to Cediranib or Olaparib Alone or Standard of Care Chemotherapy in Women with Recurrent Platinum-Resistant or Refractory Ovarian, Fallopian Tube or Primary Peritoneal Cancer (COCOS)	NRG Oncology
Hurteau	Prophylactic Salpingectomy with Delayed Oophorectomy, Risk-Reducing Salpingo-Oophorectomy and Ovarian Cancer Screening Among BRCA Mutation Carriers: A Proof of Concept Study 2103-0340	MD Anderson
Hurteau	UC10-283; NCI 8348: A Phase I/II Study of Cediranib and Olaparib in Combination for Treatment of Recurrent Platinum-Sensitive Papillary-Serous Ovarian, Fallopian Tube, or Peritoneal Cancer or for Treatment of Recurrent Triple-Negative Breast Cancer	University of Chicago/ Dana-Farber Cancer Institute/NIH/ NCI

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## DIVISION OF GYNECOLOGIC ONCOLOGY *continued*

Investigator	Clinical Trial	Sponsor
Hurteau	UC13-1323: A Phase II Study of XL184 (Cabozantinib) in Recurrent Metastatic Endometrial Cancer	University of Chicago/ National Cancer Institute (NCI)
Kim	Immortalization of Human Fallopian Tube Epithelial Cells Using Conditional Reprogramming	NorthShore
Rodriguez	A Phase III, Randomized, Double-Blind, Placebo-Controlled, Multicentre Study of Olaparib Maintenance Monotherapy in BRCA Mutated Relapsed Ovarian Cancer Patients Who Are in Complete or Partial Response Following Platinum-Based Chemotherapy, D0816C00002	Astra Zeneca
Rodriguez	Carboplatin and Dose-Dense Paclitaxel and Treatment Combinations for the Treatment of Advanced and Recurrent Ovarian Cancer	NorthShore
Rodriguez	Development of a Progestin-Based Pharmacologic Approach for the Effective Prevention of Ovarian Cancer	The Auxiliary of NorthShore University HealthSystem
Rodriguez	Endoscopic and Karyometric Assessment of Fallopian Tube Health for Ovarian Cancer Prevention	The University of Arizona/DOD
Rodriguez	Evaluation of Metformin and Simvastatin Therapy for Endometrial Cancer Using a Xenograft Mouse Model	NorthShore
Rodriguez	Evaluation of Metformin and Vitamin D for the Chemoprevention of Endometrial Cancer	NorthShore
Rodriguez	GOG-218: A Phase III Trial of Carboplatin and Paclitaxel Plus Placebo vs. Carboplatin and Paclitaxel Plus Concurrent Bevacizumab (NSC #704865, IND #7921) Followed by Placebo, vs. Carboplatin and Paclitaxel Plus Concurrent and Extended Bevacizumab, in Women with Newly Diagnosed, Previously Untreated, Stage III or IV Epithelial Ovarian, Primary Peritoneal Cancer	NorthShore
Rodriguez	Mechanisms Underlying the Protective Effect of Progestins Against Ovarian Cancer (R21)	NIH
Rodriguez	NCI 9671: Exceptional Responders Pilot Study: Molecular Profiling of Tumors from Cancer Patients Who Are Exceptional Responders	National Cancer Institute (NCI)
Rodriguez	Outpatient Platinum Desensitization Protocol for the Treatment of Gynecologic Malignancies	NorthShore
Rodriguez	Preoperative Prediction of Metastasis, Recurrence and Resistance in Endometrial Cancer Biopsies	The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc.
Rodriguez	Proteomic and Metabolomic Profiles Associated with Endometrial Carcinogenesis	
Rodriguez	Proteomic Profiling of Primary and Metastatic Ovarian and Endometrial Cancers	
Rodriguez	Proteomic Profiling of Primary and Recurrent Ovarian and Endometrial Cancers	
Rodriguez	Proteomic Profiling of Racial Disparities in Endometrial Cancer	University of Chicago
Rodriguez	UC13-1235: A Randomized Placebo-Controlled Phase II Trial of Metformin in Conjunction with Chemotherapy Followed by Metformin Maintenance Therapy in Advanced Stage Ovarian, Fallopian Tube and Primary Peritoneal Cancer	

## DIVISION OF GYNECOLOGICAL PAIN AND MINIMALLY INVASIVE SURGERY

Investigator	Clinical Trial	Sponsor
Hellman	Novel Approaches to Investigation of Menstrual Pain	NorthShore
Hellman	Neurophysiological Diagnostics for Menstrual Pain (R21)	NIH
Hellman	Optogenetic Manipulation and Uterine Contractility	NorthShore
Senapati	Laparoscopic Suturing Skills in OB/GYN Residents	NorthShore
Senapati	Registry for Gynecological Patients	NorthShore
Tu	Deciphering the Hormonal and Nociceptive Mechanisms Underlying Bladder Pain (1R01DK100368-01)	NIH
Tu	Interstitial Cystitis: Examination of the Central Autonomic Network (R01)	Medical College of Wisconsin/NIH
Tu	Novel Pelvic Floor Pain Measures to Enhance Female Pelvic Pain Evaluation (5K23HD054645-05)	NIH/NICHHD

## DIVISION OF MATERNAL-FETAL MEDICINE

Borders	Social Conditions in Pregnancy and Fetal Development	Northwestern University
Borders	Stress and Maternal-Fetal Health During Pregnancy	Northwestern University
Dinsmoor	A Randomized Trial to Prevent Congenital Cytomegalovirus (CMV) Infection	Northwestern University/NIH
Dinsmoor	Investigational Study of a Prenatal Diagnostic Test for Fetal Aneuploidy, Protocol TT-001	Tandem Diagnostics Inc.
Dinsmoor	Non-Invasive Chromosomal Examination of Trisomy Study (NEXT Study)	Aria Diagnostics/The Fetal Medicine Foundation
Dinsmoor	Prevalence of CMV Infection in Placentas of Small for Gestational Age (SGA) Neonates	NorthShore
Grable	High-Fidelity Ultrasound Simulation and Improvement in Learners' Performance	NorthShore
Ouyang	Adverse Perinatal Outcomes in Dichorionic v. Trichorionic Triplets	NorthShore
Ouyang	Complications Associated with High Dose Misoprostol Second Trimester Induction Termination	NorthShore
Ouyang	Evaluation of Perinatal Drug Screening at NorthShore	NorthShore
Ouyang	Sleep-Disordered Breathing During Pregnancy: Relationship with Preeclampsia, A Cohort Study	Northwestern University/Preeclampsia Foundation
Plunkett	A Randomized Trial of Pessary and Progesterone for Preterm Prevention in Twin Gestation with a Short Cervix (PROSPECT)	Northwestern University/National Institute of Child Health and Human Development (NICHD)
Plunkett	A Randomized Trial of 17 Alpha-Hydroxyprogesterone Caproate for Prevention of Preterm Birth in Nulliparous Women with a Short Cervix	National Heart, Lung, and Blood Institute (NHLBI)/Genetic Assn. Information Network (GAIN) Foundation for the NIH
Plunkett	A Randomized Trial of Thyroxine Therapy for Subclinical Hypothyroidism or Hypothyroxinemia Diagnosed During Pregnancy	
Plunkett	A Randomized Trial of Fetal ECG ST Segment and T Wave Analysis as an Adjunct to Electronic Fetal Heart Rate Monitoring (STAN)	

## DIVISION OF MATERNAL-FETAL MEDICINE *continued*

Investigator	Clinical Trial	Sponsor
Plunkett	An Observational Study of Hepatitis C Virus in Pregnancy	Northwestern University/NIH
Plunkett	Antenatal Late Preterm Steroids (ALPS): A Randomized Placebo-Controlled Trial	NorthShore
Plunkett	An Observational Cohort Study to Evaluate Measures of Quality of Obstetric Care	NorthShore
Plunkett	Induction in Nulliparous Women at 39 Weeks to Prevent Adverse Outcomes: A Randomized Controlled Trial. A Randomized Trial of Induction Vs. Expectant Management (ARRIVE) (part of Maternal-Fetal Network)	National Institute of Child Health and Human Development (NICHD)
Plunkett	Exploration of Barriers Facing Physicians in Diagnosing and Treating Obesity	NorthShore
Plunkett	Exploring the Role of Complementary and Integrative Health Care Providers in the Diagnosis and Treatment of Obesity	NorthShore
Plunkett	Obesity Is Underdiagnosed and Undertreated Among Reproductive-Aged Women	NorthShore
Plunkett	Obstetric Research Registry	NorthShore
Plunkett	Tissue Adhesive Compared with Steri-Strips to Reduce Wound Complications in Pfannenstiel Incision Closure After Cesarean Delivery	NorthShore
Plunkett	Translating Research Into Practice in Obstetrics (TRIO) (part of Maternal-Fetal Medicine Units Network)	Northwestern University/NIH/NICHD
Plunkett	Outcomes of Vaginal and Cesarean Delivery in Twins Delivering at Less than 34 Weeks Gestation	NorthShore
Plunkett	Fetal Cardiovascular Overgrowth and Maternal Diabetes: A Long-Term Follow-Up Study	NorthShore
Robinson	Are Women Who Have a Postpartum Hemorrhage with a Twin Delivery at Increased Risk of Postpartum Hemorrhage in a Subsequent Singleton Pregnancy?	NorthShore
Silver	Population-Based Preconception Care: An Electronic Health Record Paradigm to Improve Pregnancy Outcomes	NorthShore

## DIVISION OF OBSTETRICS

Hirsch	Autophagy in the Genesis and Prevention of Labor	March of Dimes
Hirsch	The Role of Membrane Progesterone Receptors in Primary Myometrial Cells	NorthShore

## DIVISION OF UROGYNECOLOGY AND RECONSTRUCTIVE SURGERY

Botros	Hiprex vs. Suppressive Antibiotics in the Prevention of Recurrent UTIs	2016 Pritzker Summer Research Program
Botros	A Prospective, Non-Randomized, Parallel Cohort, Multi-Center Study of Xenform vs. Native Tissue for the Treatment of Women with Anterior/Apical Pelvic Organ Prolapse	Boston Scientific
Botros	Needs Assessment of OB/GYN Fellowship Program Directors: Version #1, September 2014	NorthShore
Botros	The Role of the Integration of Tissue Components in Pelvic Floor Tissue Biomechanics Associated with Pelvic Organ Prolapse	University of Chicago-ITM/ NorthShore Research Institute Special Pilot Grant Program

## DIVISION OF UROGYNECOLOGY AND RECONSTRUCTIVE SURGERY *continued*

Investigator	Clinical Trial	Sponsor
Botros	Urogynecology Resident Teaching: Moving From Lectures to Case-Based Format	NorthShore
Botros	Which Bladder Instillations Are More Effective? DMSO vs. Marcaine/Kenalog/Heparin: A Retrospective Review	NorthShore
Gafni-Kane	Anterior Colporrhaphy With and Without Concomitant Arcus Tendineus Graft Placement for the Repair of Advance Anterior Vaginal Wall Prolapse	Boston Scientific
Gafni-Kane	Bladder Capacity as an Objective Measure of Response to Intravesical Treatment of Newly Diagnosed Interstitial Cystitis: A Prospective, Randomized Trial	NorthShore
Goldberg	Cognitive Impairment in Patients Starting on Anticholinergic Medications for OAB	NorthShore
Iyer	Curriculum Case-Based Prospective Study	NorthShore
Iyer	The Risk of Cognitive Impairment in Patients Starting Anticholinergic Medications to Treat Overactive Bladder: A Prospective Trial	NorthShore
Sand	A Double-Blind, Randomized, Controlled Trial Comparing the Safety and Efficacy of AMDC-USR with Placebo in Female Subjects with Stress Urinary Incontinence, Clinical Investigation Plan No. 13-003	Cook MyoSite Incorporated
Sand	A Prospective, Non-Randomized, Parallel Cohort, Multi-Center Study of Uphold LITE vs. Native Tissue for the Treatment of Women with Anterior/Apical Pelvic Organ Prolapse	Boston Scientific
Sand	Does the Effect Match the Symptoms: A Retrospective Cohort Study of Percutaneous Tibial Nerve Stimulation for Overactive Bladder	NorthShore
Sand	Medtronic Prospective Study to Evaluate Effectiveness with the NURO™ Percutaneous Tibial Neuromodulation System in Patients with OAB (RESET)	Medtronic
Sand	Post-Operative Pain, and Perceptions of Recuperation, After Suture-Based vs. Mesh-Based Sacrospinous Suspension	Boston Scientific
Tomezsko	Laparoscopic/Robotic Sacrocolpopexy vs. Vaginal Uterosacral Ligament Suspension: A Comparative Study of Symptomatic and Anatomic Outcomes at 1 Year	NorthShore
Tran	A Fidelity Measure for Pelvic Floor Physical Therapy in Female Pelvic Pain: A Validation Study	NorthShore
Tran	Persistence and Patient Satisfaction with Pharmacotherapy Treatment for OAB	NorthShore

## PERINATAL DEPRESSION PROGRAM

Silver	A Feasibility and Patient Acceptance Pilot Study of Computer Adaptive Technology Combined with Text Messaging for the Management of Perinatal Depression, Anxiety and Mania	NorthShore The Satter Foundation
Silver	Pilot Study of Computer Adaptive Technology for Perinatal Mood Disorder Screening During and After Pregnancy	NorthShore The Satter Foundation

## 2016 Publications

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- Stuckey, A, **Febbraro, T,** Laprise, J, Wilbur, JS, Lopes, V, Robison, K. (2016) Adherence Patterns to National Comprehensive Cancer Network Guidelines for Referral of Women With Breast Cancer to Genetics Professionals. *American Journal of Clinical Oncology* Aug;39(4):363-7.
- Thaete, LG,** Khan, S, **Neerhof, MG.** (2016) Endothelin receptor A antagonism prevents damage to glycogen-rich placental cells following uterine ischemia-reperfusion in the rat. *Reproductive Science* Nov;23(11):1518-1525.
- Tran, A, Botros, C, Botros, SM.** (2016) Concomitant incontinence surgery at the time of prolapse repair. *Current Obstetrics and Gynecology Reports* June;5(2):139-146.
- Tran, AM, Sand, PK,** Seitz, MJ, **Gafni-Kane, A,** Zhou, Y, **Botros, SM.** (2016) Does physician specialty affect persistence to pharmacotherapy among patients with overactive bladder syndrome? *International Urogynecology Journal* Aug 18. [Epub ahead of print]
- Tu, FF.** (2016) Insights gained from a negative trial of steroid blocks for perineal pain. *BJOG: An International Journal of Obstetrics and Gynaecology* Nov 4.
- Tu, FF,** As-Sanie, S. (2016) A modest proposal to investigate chronic uterine pain. *BJOG: An International Journal of Obstetrics and Gynaecology* Nov 4.
- Turrentine, MA, **Colicchia, LC, Hirsch, E,** Cheng, PJ, Tam, T, Ramsey, PS, Page-Ramsey, SM. (2016) Efficiency of screening for the recurrence of antenatal Group B streptococcus colonization in a subsequent pregnancy: A systematic review and meta-analysis with independent patient data. *American Journal of Perinatology* Apr;33(5):510-7.
- Vigorito, E, Kuchenbaecker, KB, Beesley, J, Adlard, J, Agnarsson, BA, **Rodriguez, GC,** et al. (2016) Fine-Scale Mapping at 9p22.2 Identifies Candidate Causal Variants That Modify Ovarian Cancer Risk in BRCA1 and BRCA2 Mutation Carriers. *PLoS One* Jul 27;11(7):e0158801.
- Yared, E, Dinsmoor, MJ,** Endres, LK, Vanden Berg, MJ, Maier Hoell, CJ, Lapin, B, **Plunkett, BA.** (2016) Obesity increases the risk of failure of noninvasive prenatal screening regardless of gestational age. *American Journal of Obstetrics and Gynecology* Sep;215(3):370.

## 2016 Presentations and Abstracts

Allon, R, **Schufreider, A**, McQueen, D, Lee, SM, Uhler, M, Davie, J, **Feinberg, E**. (2015) High normal CGC repeat number on the Fragile X mental retardation (FMR1) gene is not correlated with diminished ovarian reserve. University of Chicago Senior Scientific Session, Chicago, IL.

**Atashroo, D**. (2016) Chronic pelvic pain—Overview and pharmacotherapy. American Association of Gynecologic Laparoscopists' Workshop on Surgical Anatomy of the Pelvis and Procedures in Patients with Chronic Pelvic Pain. St. Joseph's Hospital and Medical Center, Phoenix, AZ.

**Atashroo, D**, King, C. (2016) Pelvic pain: Medical and surgical considerations. Baystate Department of Obstetrics and Gynecology OBGYN 55th Reunion, Springfield, MA.

Barber, M, Dmochowski, R, Nitti, V, **Sand, PK**, Shull, B. (2016) Video session: Complications of prolapse and incontinence surgery. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Borders, A**, Buss, C, Adam, E, Culhane, J, Entringer, S, Simhan, H, Williamson, D, Miller, G, Kim, K-Y, **Keenan-Devlin, L**, Garcia-Espana, F, Stehli, A, Grobman, W, Wadhwa, P. (2016) Maternal cortisol regulates placental CRH production in human gestation. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Borders, A**, Buss, C, Williamson, D, Culhane, J, Simhan, H, Adam, E, Grobman, W, Wadhwa, P. (2016) Exposure to stressful events is associated with maternal cortisol and placental corticotropin-releasing hormone. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Borders, A**, Culhane, J, Wadhwa, P, Kim, K-Y, Miller, G, Matthew, L, Simhan, H, Williamson, D, Adam, E, Buss, C, Garcia-Espana, F, Entringer, S, Grobman, W. (2016) Association of elevated C-reactive protein (CRP) in mid-pregnancy with gestational age at birth. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Borders, A**, Culhane, J, Wadhwa, P, Kim, K-Y, Miller, G, Matthew, L, Simhan, H, Williamson, D, Adam, E, **Keenan-Devlin, L**, Grobman, W. (2016) Elevated serum mid-pregnancy TNF $\alpha$  is associated with preterm birth. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Borders, A**, Wadhwa, P, Culhane, J, Williamson, D, Simhan, H, Grobman, W. (2016) Placental corticotropin-releasing hormone (pCRH) is associated with shorter gestation and birth weight. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Botros, C**, Iyer, S, Tran, A, **Goldberg, RP**. (2016) A rare case of vaginal vault prolapse and surgical management in a patient with Mayer-Rokitansky-Küster-Hauser (MRKH) Syndrome. American Urogynecologic Society 37th Annual Scientific Meeting, September, Denver, CO.

**Botros, C**, Iyer, S, Tran, A, **Goldberg, RP**. (2016) A rare case of vaginal vault prolapse and surgical management in a patient with Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome. International Urogynecological Association 41st Annual Meeting, Cape Town, South Africa.

Buss, C, Entringer, S, Wadhwa, PD, Adam, E, Culhane, J, Grobman, W, Kim, K, Matthew, L, **Borders, A**, et al. (2016) Maternal childhood trauma and cortisol during pregnancy. Society for Maternal-Fetal Medicine 36th Annual Meeting, Atlanta, GA.

**Byrne, J**, **Stephens, A**, **Kaul, K**, **Dinsmoor, M**. (2016) Prevalence of cytomegalovirus infection in placentas and umbilical cords with inflammation from unexplained small for gestational age neonates: A pilot study. Infectious Disease Society for Obstetrics and Gynecology 43rd Annual Scientific Meeting, Annapolis, MD.

**Coulam, CB**, Dambaeva, SV, Katukurundage, D, Beaman, K. (2016) Endometrial immune profiling may help in treating women experiencing recurrent implantation failure. American Society for Reproductive Immunology 36th Annual Meeting, Baltimore, MD.

Culhane, JF, Grobman, W, Kim, K, Wadhwa, P, Simhan, H, Williamson, D, **Borders, A**. (2016) Maternal childhood trauma, depressive symptoms and small-for-gestational-age birth. Society for Maternal-Fetal Medicine 36th Annual Meeting, Atlanta GA.

Culligan, P, DeLancey, J, **Goldberg, RP**, Paraiso, MF, Rosenblatt, P, **Sand, PK**, **Tomezsko, JE**. (2016) Guided anatomic dissection and surgical anatomy of the pelvis. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

Culligan, P, **Goldberg, RP**, Paraiso, MF, Rosenblatt, P, **Sand, PK**. (2016) Surgeon's workshop: Laparoscopic and vaginal reconstructive surgery. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

Culligan, P, Paraiso, MF, Rosenblatt, P, **Senapati, S**. (2016) Laparoscopic skills lab. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

DeLancey, J, Paraiso, MF, **Sand, PK**, **Tomezsko, JE**. (2016) Surgeon's workshop: Anti-incontinence operations and complications. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

Entringer, S, Wadhwa, P, Culhane, J, Grobman, W, Miller, G, Simhan, H, Williamson, D, **Borders, A**. (2016) Glucocorticoid receptor sensitivity during pregnancy: Association with maternal pre-pregnancy BMI. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

**Goldberg, RP**. (2016) Abdominal sacrocolpopexy: Outcomes and minimally invasive approaches. XXVII Congreso Nacional de Urología Ginecológica Sociedad Mexicana de Urología Ginecológica (SMUG), León, Mexico.

**Goldberg, RP**. (2016) Anterior-apical mesh: Our experience at NorthShore/University of Chicago. XXVII Congreso Nacional de Urología Ginecológica Sociedad Mexicana de Urología Ginecológica (SMUG), León, Mexico.

**Goldberg, RP**. (2016) New innovations in vaginal prolapse surgery. Taiwan Urological Society, Sun Moon Lake, Taiwan.

**Goldberg, RP**. (2016) Synthetic mesh kits. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Goldberg, RP**. (2016) Update on vaginal mesh and prolapse repair. Chirurgische Klinik München-Bogenhausen, Munich, Germany.

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2016 Presentations and Abstracts *continued*

- Goldberg, RP.** (2016) Uterine preservation during reconstructive surgery: You might want that uterus. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.
- Goldberg, RP.** (2016) Why do I do vaginal vault suspensions? Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.
- Goldberg, RP, Lozo, S.** (2016) Live surgery: Uphold suspension procedure. American Urogynecologic Society 37th Annual Scientific Meeting, Denver, CO.
- Hirsch, E.** (2016) Changing guidelines in breast and cervical cancer screening. General Internal Medicine Education Meeting, NorthShore University HealthSystem, Northbrook, IL.
- Hirsch, E.** (2016) Some new observations on mechanisms of inflammation-induced preterm birth in animal models. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Preterm Birth International Collaborative (PREBIC) and Myometrium/Parturition Satellite Meeting, Montreal, Canada.
- Hirsch, E.** (2016) The vanishing art of operative vaginal delivery—it's not too late. American Congress of Obstetricians and Gynecologists Regional Meeting, Districts I, V and VI. Toronto, Ontario, Canada.
- Iyer, S, Botros, C, Tran A, Botros, S.** (2016) A urogynecology case-based curriculum for obstetrics and gynecology residents. University of Chicago Medical Education Day, Chicago, IL.
- Iyer, S, Lotsof, E, Zhou, Y, Tran, AM, Botros, C, Sand, PK, Goldberg, R, Tomezsko, J, Gafni-Kane, A, Botros, S.** (2016) Which bladder instillations are more effective? DMSO vs. bupivacaine/heparin/triamcinolone: A retrospective review. International Urogynecological Association 41st Annual Meeting, Cape Town, South Africa.
- Iyer, S, Lotsof, E, Zhou, Y, Tran, AM, Botros, C, Sand, PK, Goldberg, R, Tomezsko, J, Gafni-Kane, A, Botros, S.** (2016) Which bladder instillations are more effective? DMSO vs. bupivacaine/heparin/triamcinolone: A retrospective review. Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction Winter Meeting, New Orleans, LA.
- Iyer, S, Lotsof, E, Zhou, Y, Tran, A, Botros, C, Sand, P, Goldberg, R, Tomezsko, J, Gafni-Kane, A, Botros, S.** (2016) Who responds to treatment? Describing patient response to bladder instillation therapy for bladder pain syndrome/interstitial cystitis. American Urogynecologic Society 37th Annual Scientific Meeting, Denver, CO.
- Iyer, S, Scalabrin Reis, R, Seitz, MJ, Tran, AM, Botros, S, Tomezsko, J, Sand, P, Zhou, Y, Gafni-Kane, A.** (2016) Comparing anterior prolapse repair with and without allograft use: A randomized control trial with long-term follow-up. American Urogynecologic Society 37th Annual Scientific Meeting, Denver, CO.
- Kim, JJ.** (2016) Perinatal depression screening: Implementation, critical success factors and future directions. Postpartum Depression Conference, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL.
- Kim, JJ.** (2016) Perinatal depression screening at NorthShore: Implementation, outcomes and future directions. Depression Symposium, NorthShore University HealthSystem, Evanston, IL.
- Kim, JJ.** (2016) Perinatal mood disorders: What psychologists need to know. American Psychological Association 124th Annual Convention, Preconference Workshop, Denver, CO.
- Kim JJ, La Porte LM, Zhou Y, Adams MG, Silver RK.** (2016) Persistence of depression and suicide risk within and across pregnancies. American Congress of Obstetricians and Gynecologists 64th Annual Clinical and Scientific Meeting, Washington, D.C.
- Kim JJ, Silver RK, Elue R, Gibbons RD.** (2016) Feasibility of computerized adaptive testing for perinatal depression screening and diagnosis. North American Society for Psychosocial Obstetrics & Gynecology Biennial Meeting, New York, NY.
- Kim, JS, Fehniger, J, Mills, KA, Ross, JG, Hurteau, JA, Kirschner, CV, Rodriguez, GB, Yamada, SD, Lee, NK, Diaz, ES, Tenney, ME.** (2015) Clinical utility of routine postoperative laboratory studies in uncomplicated patients undergoing robotic hysterectomy for endometrial cancer. Society of Gynecologic Oncology Annual Meeting on Women's Cancer, San Diego, CA.
- Klipstein, S** (2016) Managing conflicts between physician autonomy and patient choice. Beth Israel Deaconess Harvard Medical School Grand Rounds, Boston, MA.
- Kuhn, C, Senapati, SS, Tu, FF, Hellman, KM.** (2016). The relationship between fMRI events resembling sustained uterine contractions and spontaneous menstrual cramping report. International Pelvic Pain Society, Chicago, IL.
- Miller, G, Williamson, D, Wadhwa, P, Culhane, J, Simhan, H, Grobman, W, **Borders, A.** (2016) Racial and social disparities in inflammatory gene expression during pregnancy. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.
- Nebgen, DR, Holman, LL, **Hurteau, J**, Keeler, E, Chisholm, GB, Sun, CC, Lu, KH. (2016) Prophylactic salpingectomy with delayed oophorectomy (PSDO): Feasibility study in women with BRCA mutations. American Society of Clinical Oncology 51st Annual Meeting, Chicago, IL.
- Noguchi, A, Ittmann, P, King, P, Goel, S, Mittal, K, **Finnegan, K, Borders, A.** (2016) Improving nutritional outcomes of VLBW infants in Illinois within a statewide Perinatal Quality Collaborative (ILPQC). Pediatric Academic Society, Baltimore, MD.
- Ross, J, Braswell, K, de Silva, L, Scalici, J, Finan, M, Mujica, F, Strutsman, S, Nicolson, W, Harmon, M, Rocconi, R.** (2016) Unraveling the etiology of ovarian cancer racial disparity in the Deep South: Is it nature or nurture? Society of Gynecologic Oncology Annual Meeting on Women's Cancer, San Diego, CA.
- Ross, J, Nicolson William, N, Boudreau, S, Harmon, M, de Silva, L, Finan, M, Scalici, J, Rocconi, R.** (2016) Evaluating racial differences in molecular complexity in gynecologic cancers. Society of Gynecologic Oncology Annual Meeting on Women's Cancer, San Diego, CA.



Ross, K, Miller, G, Qadir, S, **Keenan-Devlin, L, Borders, A.** (2016) Maternal anti-inflammatory profiles during pregnancy and cord blood inflammation. Society for Reproductive Investigation 63rd Annual Scientific Meeting, Montreal, Canada.

Ross, K, Miller, G, Qadir, S, **Keenan-Devlin, L, Borders, A.** (2016) Romantic partner relationship quality and maternal inflammation during pregnancy. Society for Maternal-Fetal Medicine 36th Annual Meeting, Atlanta, GA.

**Sand, PK.** (2016) Advances in the treatment of bladder pain syndrome. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Sand, PK.** (2016) Biological grafts in reconstructive surgery. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Sand, PK.** (2016) Diagnosis and treatment of overactive bladder syndrome. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Sand, PK.** (2016) How I handle refractory incontinence. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Sand, PK.** (2016) Neuromodulation for idiopathic and neurogenic OAB. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Sand, PK.** (2016) Neuromodulation for urinary and anal incontinence. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Sand, PK.** (2016) Oral, transdermal and intravesical pharmacotherapy for OAB. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Sand, PK.** (2016) Treatment of posterior compartment prolapse with and without adjuvant grafts. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Sand, PK.** (2016) Urodynamic investigation of the storage phase. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Sasso, K.** (2016) Behavioral therapy for stress and urgency incontinence. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Sasso, K.** (2016) How to incorporate behavioral therapy, electrical stimulation and devices to treat incontinence for your practice. Rodney Appell Memorial Update in Gynecologic Urology 21st Annual Conference, Grand Cayman, Cayman Islands.

**Schneider, P,** Palatnik, A, Peaceman, A. (2016) Outcomes of planned vaginal and cesarean delivery in twin pregnancies between 24–34 weeks of gestation. Society for Maternal-Fetal Medicine 36th Annual Meeting, Atlanta, GA.

Seitz, M, Tran, A, Iyer, S, Jirschele, K, Zhou, Y, **Tomezsko, J, Gafni-Kane, A, Botros, S, Sand, P.** (2016) Comparison of one-year outcomes for sacrospinous hysteropexy augmented with polypropylene mesh and human dermal graft: An ambidirectional cohort study. Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction Winter Meeting, New Orleans, LA.

**Senapati, S.** (2016) Diagnosing pelvic pain. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Senapati, S.** (2016) Effective surgical treatments for chronic pelvic pain: A discussion of the evidence. University of Chicago Department of Obstetrics and Gynecology Grand Rounds, Chicago, IL.

**Senapati, S.** (2016) Nonsurgical treatment of pelvic pain. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Senapati, SS, Tu, FF, Kuhn, C, Hellman, KM.** (2016) Functional phenotyping of menstrual pain. American Association of Gynecologic Laparoscopists 45th Global Congress of Minimally Invasive Gynecology, Orlando, FL.

Son, M, Einerson, BD, **Schneider, P,** Fields, IC, Grobman, WA, Miller, ES. (2016) Is there an association between indication for intrauterine balloon tamponade and balloon failure? Society for Maternal-Fetal Medicine 36th Annual Meeting, Atlanta, GA.

**Tomezsko, JE.** (2016) Estrogen effects on the lower urinary tract. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Tomezsko, JE.** (2016) Tension-free midurethral slings. Advances in Urogynecology and Reconstructive Pelvic Surgery 25th Annual Conference, Chicago, IL.

**Tran, A, Sand, P,** Seitz, M, Jirschele, K, **Tomezsko, J,** Zhou, Y, **Iyer, S, Botros, S.** (2016) Overactive bladder pharmacotherapy: Does medication cycling help? Society of Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction Winter Meeting, New Orleans, LA.

**Tran, AM, Tu, F,** Kotarinos, K, Seitz, MJ, Scalabrin Reis, R, **Goldberg, R, Tomeszko, J, Botros, S.** (2016) Development of a fidelity instrument for pelvic floor physical therapy for female pelvic pain: A psychometric validation study. American Urogynecologic Society 37th Annual Scientific Meeting, Denver, CO.

Zuckerman, R, **Hellman, KM,** Siltan, RL, Tu, FF. The distinct roles of somatization in menstrual and non-menstrual pelvic pain. International Pelvic Pain Society, Chicago, IL.

## 2016 Grants and Research Support

### Ann Borders, MD, MSc, MPH

- Principal Investigator: National Institute on Drug Abuse (1PO1DA041313-01); Neurodevelopmental characterization of behavioral disinhibition pathways: Mapping and modifying the contribution of early life stress.
- Principal Investigator: March of Dimes Community Grant, Breastfeeding Peer Counselor Community Partnership to provide breastfeeding education and support to expectant mothers and families through an innovative, collaborative peer-counselor program that targets the underserved populations in Evanston and Skokie.
- Principal Investigator: Centers for Disease Control and Prevention, Illinois Perinatal Quality Collaborative Grant Award to expand the Collaborative and implement new perinatal quality initiatives with hospitals throughout the state of Illinois.
- Awardee: North Suburban Healthcare Foundation to create the Breastfeeding Peer Counselor Community Partnership (BPCCP) initiative based at NorthShore University HealthSystem, Evanston Hospital.

### Sylvia Botros, MD, MSCI

- Principal Investigator: A prospective, nonrandomized, parallel cohort, multi-center study of Xenform vs. native tissue for the treatment of women with anterior/apical pelvic organ prolapse. Sponsor: Boston Scientific.

### Elena Diaz Moore, MD

- Principal Investigator with effort supported by the NorthShore Auxiliary Award: Pilot study of the impact of early palliative care on quality of life in recurrent ovarian cancer.
- Principal Investigator: Venous thrombosis in patients receiving extended pharmacologic prophylaxis following minimally invasive surgery for endometrial cancer. Sponsor: NorthShore
- Principal Investigator: Evaluation of clinical outcomes in ovarian cancer patients undergoing variable numbers of postoperative chemotherapy cycles following neoadjuvant chemotherapy and interval cytoreductive surgery sponsored by NorthShore Department of Obstetrics and Gynecology Innovation Grant.

### Mara Dinsmoor, MD, MPH

- Principal Investigator: Investigational study of a prenatal diagnostic test for fetal aneuploidy, Protocol TT-001. Sponsor: Tandem Diagnostics, Inc.
- Principal Investigator: Non-invasive Examination of Trisomy (NEXT) Study: Multicenter study of aneuploidy screening comparing cell-free fetal DNA to current first trimester screening. Sponsor: Ariosa Diagnostics.
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; A randomized trial to prevent congenital cytomegalovirus (CMV) infection.

### Roger Goldberg, MD, MPH

- Principal Investigator: The risk of cognitive impairment in patients starting anticholinergic medications to treat overactive bladder: A prospective trial. Sponsor: NorthShore
- Awardee: NorthShore Department of Obstetrics and Gynecology Innovation Grant for development of the NorthShore Women's Health Cross Screen to collaborate across multidisciplinary specialties in the care of women sponsored by NorthShore Department of Obstetrics and Gynecology Innovation Grant.

### Kevin Hellman, PhD

- Principal Investigator: National Institute of Child Health and Human Development (R21HD081709); Neurophysiological diagnostics for menstrual pain.

### Emmet Hirsch, MD

- Principal Investigator: March of Dimes Prematurity Initiative Award (#21-FY15-2708); Autophagy in the Prevention and Genesis of Labor; 3/1/2015–2/28/2017.

### Jean Hurteau, MD

- Principal Investigator: A phase III placebo-controlled study of carboplatin/paclitaxel with or without concurrent and continuation maintenance veliparib (PARP Inhibitor) in subjects with previously untreated stages III or IV high-grade serous epithelial ovarian, fallopian tube; or primary peritoneal cancer; Protocol Number M13-694. Sponsor: AbbVie.
- Principal Investigator: Gynecological Oncology Group (GOG) 0238; a randomized trial of pelvic irradiation with or without concurrent weekly cisplatin in patients with pelvic-only recurrence of carcinoma of the uterine corpus. Sponsor: NRG/NCI.
- Principal Investigator: GOG 0258; A randomized phase III trial of cisplatin and tumor volume directed irradiation followed by carboplatin and paclitaxel vs. carboplatin and paclitaxel for optimally debulked, advanced endometrial carcinoma. Sponsor: NRG/NCI.
- Principal Investigator: GOG 0264; A randomized phase II trial of paclitaxel and carboplatin vs. bleomycin, etoposide and cisplatin for newly diagnosed advanced stage and recurrent chemo-naïve sex cord-stromal tumors of the ovary. Sponsor: NRG/NCI.
- Principal Investigator: GOG 0274; Phase III trial of adjuvant chemotherapy as primary treatment for locally advanced cervical cancer compared to chemoradiation alone: The OUTBACK Trial.
- Principal Investigator: GOG 281; A randomized phase II/III study to assess the efficacy of trametinib (GSK 1120212) in patients with recurrent or progressive low-grade serous ovarian cancer or peritoneal cancer. Sponsor: NRG/NCI.
- Principal Investigator: GOG 286B; A randomized phase II/III study of paclitaxel/carboplatin/metformin (NSC#91485) vs. paclitaxel/carboplatin/placebo as initial therapy for measurable stage III or IVA, IVB or recurrent endometrial cancer. Sponsor: NRG/NCI.
- Principal Investigator: NRG-GY005; A randomized phase II/III study of the combination of cediranib and olaparib compared to cediranib or olaparib alone, or standard of care chemotherapy in women with recurrent platinum-resistant or refractory ovarian, fallopian or primary peritoneal cancer. Sponsor: NRG/NCI.

- Site Principal Investigator: UC13-1000; Carboplatin, gemcitabine and mifepristone for advanced breast cancer and recurrent or persistent epithelial ovarian cancer. Sponsor: University of Chicago.
- Principal Investigator: Prophylactic salpingectomy with delayed oophorectomy, risk-reducing salpingo-oophorectomy and ovarian cancer screening among BRCA mutation carriers: A proof of concept study 2103-0340. Sponsor: MD Anderson.

### Jo Kim, PhD

- Awardee: North Suburban Healthcare Foundation; Expanding the safety net for mothers and families three-year program grant award.
- Principal Investigator: State of Illinois Department of Human Services; NorthShore Hotline Community Services Agreement.
- Principal Investigator: The Satter Foundation; Identifying and helping women and families at risk for perinatal mood disorders: A feasibility study of computer adaptive technology for perinatal depression.
- Principal Investigator: Implications of perinatal depression screen administration. Sponsor: NorthShore.

### Beth Plunkett, MD, MPH

- Site Principal Investigator: Maternal-Fetal Medicine Units Network; Antenatal late preterm steroids (ALPS): A randomized placebo-controlled trial.
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; A trial of pessary and progesterone for preterm prevention in twin gestation with a short cervix (PROSPECT).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; An observational study of hepatitis C virus (HCV) in pregnancy.
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; A randomized trial of 17 alpha-hydroxyprogesterone caproate for prevention of preterm birth in nulliparous women with a short cervix (SCAN).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; Translating research into practice in obstetrics (TRIO).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; An observational cohort study to evaluate measures of quality of obstetric care (APEX).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; A randomized trial of fetal ECG ST segment and T wave analysis as an adjunct to electronic fetal heart rate monitoring (STAN).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; A randomized clinical trial of antioxidants to prevent preeclampsia (CAPPS).
- Site Principal Investigator: Maternal-Fetal Medicine Units Network; Induction in nulliparous women at 39 weeks to prevent adverse outcomes: A randomized trial of induction vs. expectant management (ARRIVE).

### Gustavo Rodriguez, MD

- Site Principal Investigator: The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc./DOD; Gynecological Cancer Translational Research Center of Excellence (GYNE-COE) (W81XWH-11-2-0131).

- Principal Investigator: Ovarian cancer research. Sponsor: Bears Care.
- Principal Investigator: A phase III, randomized, double-blind, placebo-controlled, multicenter study of olaparib maintenance monotherapy in BRCA mutated relapsed ovarian cancer patients who are in complete or partial response following platinum-based chemotherapy, D0816C00002. Sponsor: AstraZeneca.
- Site Principal Investigator: A randomized, placebo-controlled phase II trial of metformin in conjunction with chemotherapy followed by metformin maintenance therapy in advanced-stage ovarian, fallopian tube and primary peritoneal cancer. Sponsor: The University of Chicago.
- Principal Investigator: National Center Institute (NCI) 9671; Exceptional responders pilot study: Molecular profiling of tumors from cancer patients who are exceptional responders.
- Principal Investigator: Development of a progestin-based pharmacologic approach for the effective prevention of ovarian cancer. Sponsor: The Auxiliary of NorthShore.
- Principal Investigator: Efficacy of carboplatin and weekly paclitaxel for the treatment of carcinosarcoma. Sponsor: NorthShore.
- Principal Investigator: Investigation of progesterone-mediated mechanisms of cancer prevention in the fallopian tube: Comparison of fallopian tubes from postpartum vs. nonpregnant women. Sponsor: NorthShore.
- Principal Investigator: Outpatient platinum desensitization protocol for the treatment of gynecologic malignancies. Sponsor: NorthShore.
- Principal Investigator: Ovarian cancer research. Sponsor: Sandy and Ron Schut.

### Peter Sand, MD

- Principal Investigator: A double-blind, randomized, controlled trial comparing the safety and efficacy of AMDC-USR with placebo in female subjects with stress urinary incontinence, Clinical Investigation Plan No. 13-003. Sponsor: Cook MyoSite, Inc.
- Principal Investigator: A prospective, nonrandomized, parallel cohort, multicenter study of Uphold LITE vs. native tissue for the treatment of women with anterior/apical pelvic organ prolapse. Sponsor: Boston Scientific.
- Principal Investigator: **PR**ospective Study to **E**valuate Effectiveness with the NURO™ **PE**rcutaneous **T**ibial Neuromodulation System in Patients with OAB (RESET). Sponsor: Medtronic.

### Frank Tu, MD, MPH

- Principal Investigator: National Institutes of Health; Deciphering the hormonal and nociceptive mechanisms underlying bladder pain (R01).
- Co-Investigator: ICECAN: Interstitial cystitis effects of the central autonomic network. Sponsor: Medical College of Wisconsin/NIH.
- Principal Investigator: National Institutes of Health/National Institute of Child Health and Human Development (5K23HD054645-05); Novel pelvic floor pain measures to enhance female pelvic pain evaluation.
- Co-Investigator: National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK); Multidisciplinary approach to pelvic pain.

## Service to the Department Committees

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- 2 Co-Chair
- 3 Anesthesiology
- 4 Risk Management
- 5 Perioperative Services
- 6 Pathology
- 7 Family Medicine
- 8 Pharmacy
- 9 Quality Improvement
- 10 Neonatology
- 11 Infection Control



## Department Growth

**The Department realized important growth in new members in 2016. Each is playing a critical role in realizing our goals of outstanding clinical care, leading academics and recognized research.**

**Leilah Backhus, MD, MS**, received her medical degree from University of Illinois at Chicago School of Medicine and completed her residency in Obstetrics and Gynecology at the University of Chicago Medical Center. She is currently in practice in the NorthShore Medical Group with Drs. A. Michael Drachler, Emmet Hirsch, Fabio Ortega, Charla Simon, Prerna Suri and Kerry Swenson.

**Lena Braginsky, MD**, received her medical degree from Loyola University Chicago Stritch School of Medicine and completed her residency in Obstetrics and Gynecology at Advocate Illinois Masonic Medical Center. She is pursuing fellowship training in the NorthShore University HealthSystem/University of Chicago Maternal-Fetal Medicine program.

**Anna Dekleva, MSW, LCSW**, received her Master of Social Work degree from University of Chicago, School of Social Service Administration. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Nancy Goldin, MA, LCSW**, received her Master of Arts degree from University of Chicago, School of Social Service Administration. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Margaret (Peggy) Healy, MSW, LCSW**, received her Master of Social Work degree from Dominican University. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Nicolai Hinds, MD**, received his medical degree from Emory University School of Medicine and completed his residency in Obstetrics and Gynecology at Henry Ford Hospital. He is currently in practice in the NorthShore Medical Group with Drs. Carl Buccellato, Joby George, Susan Kramer, Edward Lee, Erica Smith, Mary Faith Terkildsen and Megan Valassis.

**Claire Hoppenot, MD**, received her medical degree from Sidney Kimmel Medical College at Thomas Jefferson University and completed her residency in Obstetrics and Gynecology at Northwestern University. She is pursuing Gynecologic Oncology fellowship training with the NorthShore Division of Gynecologic Oncology.

**Mary Tilley Jenkins Vogel, MD**, received her medical degree from University of North Carolina School of Medicine, completed her residency in Obstetrics and Gynecology at University of Washington Medical Center and her fellowship in Gynecologic Oncology at UCLA/Cedars-Sinai Medical Center. She is currently in practice in the NorthShore Medical Group–Gynecologic Oncology with Drs. Jean Hurteau, Carolyn Kirschner, Elena Diaz Moore and Gustavo Rodriguez.

**Maryanne Kennedy, MSW, LCSW**, received her Master of Social Work degree from Loyola University. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Svjetlana Lozo, MD**, received her medical degree from St. George's School of Medicine and completed her residency in Obstetrics and Gynecology at Maimonides Medical Center. She is pursuing Urogynecologic fellowship training in the NorthShore Division of Urogynecology and Reconstructive Surgery.

**Priya Mishra, PhD**, received her doctorate in virology and molecular biology from University of Notre Dame and her master's in biotechnology from University of Rajasthan, Jaipur, India. She is a postdoctoral research fellow in autophagy and premature labor studies in Dr. Emmet Hirsch's laboratory.

**Ellen O'Donovan, MS, LCPC**, received her Master of Science degree from University of Wisconsin-Madison. She is a licensed clinical professional counselor and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Folabomi (Bomi) Oladosu, PhD**, received her doctorate in neurobiology from University of North Carolina–Chapel Hill. She is a postdoctoral research fellow in pelvic pain studies with Dr. Kevin Hellman.

**Solveig Roverud, MSW, LCSW**, received her Master of Social Work degree from University of Illinois at Chicago, Jane Addams College of Social Work. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Beth Schwartz, WHNP, RNC, MS**, received her Master of Science degree in nursing from Pace University and her Women's Health Nurse Practitioner certification from Simmons College. She is serving as an Advanced Practice Nurse in the Department of Obstetrics and Gynecology supporting Evanston Hospital Labor and Delivery and the resident Gynecology team.

**Christen Scozzafave, MSCW, LCSW**, received her Master of Clinical Social Work degree from University of Chicago, School of Social Service Administration. She is a licensed clinical social worker and is serving as a Perinatal Family Support Specialist in the Perinatal Family Support Center.

**Sarah Sumagin, CNM**, received her Master of Science in nursing-midwifery from Emory University. She is currently in practice at North Shore Associates in Gynecology and Obstetrics with Drs. Gail Goldberg, Pamela Goodwin, Kim Johnson, and H. Jacob Saleh and Certified Nurse Midwives Sarah Bartulis, Gaye Koconis, Debora Lesnick, and Barbara Zimmerman-Minnich.

**Megan Valassis, MD**, received her medical degree from University of Michigan Medical School and completed her residency in Obstetrics and Gynecology from University Hospitals Case Western Medical Center. She is currently in practice in the NorthShore Medical Group with Drs. Carl Buccellato, Joby George, Nicolai Hinds, Susan Kramer, Edward Lee, Erica Smith and Mary Faith Terkildsen.

**Janet Winslow, MSSA, LCSW**, received her Master of Science in social administration from Case Western Reserve University, Mandel School of Applied Social Sciences. She is a licensed clinical social worker and is serving as Supervisor, Perinatal Family Support Center.

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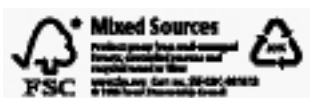
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## Transforming Women's Healthcare

NorthShore University HealthSystem is steadfastly committed to serving patients, families and our community. With our team of excellent physicians and our investment in the most advanced technology, we are providing the finest in prevention, diagnosis, treatment and compassionate care to those we are privileged to serve. To learn more about NorthShore Obstetrics and Gynecology, visit [northshore.org/obgyn](http://northshore.org/obgyn).



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