

# **ANNUAL REPORT**

**JULY 1, 2021 to JUNE 30, 2022**

**LEWIS KATZ SCHOOL OF MEDICINE AT TEMPLE UNIVERSITY**

**DEPARTMENT OF OBSTETRICS, GYNECOLOGY & REPRODUCTIVE SCIENCES**



***“EXCELLENCE IN SERVICE”***

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In June 2021 Temple Health acquired the hospital previously occupied by Cancer Treatment Centers of America in the Juniata Park neighborhood of Philadelphia, just 4 miles from the Temple University Hospital (TUH)-Main Campus. The leadership of Temple Health made the strategic decision of making the site a women and infants campus of TUH. Many committees and working groups have been established and are working hard at planning for this new campus.

In preparation for the expansion of Ob/Gyn services we have recruited several physicians to join our faculty. Dr. Gabriela Algarroba (trained at NYU Long Island), Dr. Janhavi Arun (trained at Henry Ford Health State/Wayne State University), Dr. Zeynep Koc (trained at Pennsylvania State University Hershey Medical Center), and Dr. Yasmin Korayem (trained at Michigan State University/Hurley Medical Center) joined our full-time faculty this summer. In addition, we were able to recruit replacements for faculty positions that were left vacant when Dr. Juan Diaz moved to the University of Miami and Dr. Patricia Mattingly moved to Georgia. Dr. Amy Cruz joined us from Pennsylvania State University Hershey Medical Center where she was assistant professor of obstetrics and gynecology. We appointed her Quality and Safety Officer of our department and associate director of the Ob/Gyn clerkship. Dr. Anna Zelivianskaia also joined the department this summer. She is a fellowship-trained minimally invasive gynecologic surgeon. Her practice will be based at the Jeanes campus. One of our specialists in urogynecology moved to the University of California San Diego and we are actively recruiting for a replacement. Dr. Gloria Diaz semiretired this summer and we are actively recruiting to fill the vacancy. We are recruiting for an additional three obstetricians/gynecologists to provide care to our patients at the new Women's Campus and continue to provide outpatient care, consultations and emergency care at the Main Campus.

In FY22 we contracted to provide Maternal Fetal Medicine services at Holy Redeemer Hospital. Currently we provide physician coverage for outpatient and inpatient obstetrical ultrasounds, consultations and procedures including amniocentesis and chorionic villous sampling. In FY22, there were 15,851 patient encounters at Holy Redeemer Hospital. This number includes 935 outpatient consults and follow-up, 9,200 obstetrical ultrasounds, 9 amniocenteses, 4,931 fetal

wellbeing tests and 646 Doppler flow studies. In addition to onsite coverage of the MFM practice four days a week, we provide evening and weekend on call services. We plan to continue to expand our services at Holy Redeemer Hospital to include being able to staff their prenatal diagnosis unit with 2 physicians 4 days a week. To achieve this, we are actively recruiting for an additional Maternal-Fetal Medicine specialist.

The department faculty members participate in numerous intra- and extra-mural committees and hold multiple leadership positions listed in this report. Ten of our faculty members were listed in Philadelphia Magazine 2022 “Top Doctors”.

Our residency is a competitive fully approved 4-year program (without citations). We are approved to have six residents at each level plus a 7<sup>th</sup> non-categorical (preliminary) intern. We continue to attract top tier applicants. We received approximately 1100 applications for our six positions and interviewed 87 highly qualified applicants. We continue to match in the top quarter of our rank list with a diverse and accomplished group of students. Our gynecologic oncology fellowship is entering its eighth year. The program is 3 years in duration, with the first year being dedicated to research activities. The second and third years of the fellowship consist of monthly clinical rotations divided between the Fox Chase and Temple-Main campuses. Our first-year fellow is Dr. Jason Conge who completed a residency in obstetrics and gynecology at Magee Women’s Hospital in Pittsburgh.

The education of medical students continues to evolve. In Spring FY22, a new intersession was developed to introduce the students to the field of clinical Ob/Gyn and provide them with the foundation for success in the clerkship. In FY22, students benefited from the state-of-the-art web-based learning module that was developed by one of our MS-4 students. The module was posted to Canvas to train the MS-3 clerkship students on interpreting fetal heart tracing patterns. Canvas links also continue to provide access to the outstanding educational and training modules on Domestic Violence for Medical Professionals, pelvic anatomy and vaginal deliveries. The web-based self-study modules and practice questions provided by the Association of Professors of Obstetrics and Gynecology are available to all our students. In FY22, the department continued to offer exclusive Lewis Katz School of Medicine at Temple University (LKSOM) videos to introduce students to the steps of a vaginal delivery and the well-woman exam. In FY22, the Canvas site was again updated to provide a central clearinghouse for all students enrolled in the MS-3 Ob/Gyn Clerkship. Links to the course syllabus, clerkship objectives, orientation training, educational materials, lecture slides, and online learning modules ensure comparability in student education between sites. A longitudinal faculty outpatient experience for the MS-3 clerkship was piloted in 2015 and rolled out in 2016 and continues to be a success in 2021-22. Faculty members participate at multiple office sites. In Spring FY 22 we extended this popular program to Jeanes Hospital with outstanding reviews. In the 2021-22 residency match 11 LKSOM students were accepted into an Obstetrics and Gynecology residency (10 categorical, 1 preliminary position).

We continue to be a research site for several pharmaceutical industry-sponsored clinical trials. We continue to participate in NIH-funded Gynecologic Oncology Group (now NRG) clinical trials. We are also a member of the Perinatal Research Consortium. Our faculty continues to be

academically productive with publications in peer-reviewed journals and presentations at national meetings, which are listed in this report.

The faculty clinical productivity through June 2021 was at 66.2 percentile of the MGMA benchmark, adjusted for clinical FTEs. The Department's revenue and expense through June was favorable, with a 44% positive variance to budget.

In FY22 there were 2092 obstetrical deliveries at TUH. Thirty-three percent of the obstetrical deliveries at Temple University Hospital in FY22 were by cesarean section. The most recent CDC data (2020) shows a 31.8% cesarean section rate nationally. In FY22 there were 4547 visits to our obstetrical triage unit. The complexity of the obstetrical cases continues to be high with almost 1400 visits to our high-risk obstetrical service. Our perinatal diagnostic services at TUH-Main continue to be busy and growing with over 18,000 procedures performed at TUH Fetal Center in FY22 and another 970 at our satellites (Episcopal and Northeastern campuses). Just over 700 patients received genetic counseling in FY22.

In FY22, 1265 women underwent gynecologic surgery at Temple University Hospital-Main Campus (340 major and 925 minor procedures). This includes 126 major surgical procedures for suspected or documented gynecologic malignancies. Sixty abdominal, 77 laparoscopic and 34 trans-vaginal hysterectomies were performed. A total of 139 gynecologic surgical procedures were performed with robotic assistance at Temple University Hospital-Main campus. There were 119 procedures for urinary incontinence and/or pelvic reconstructive surgery performed at Temple University Hospital in FY22. In addition to the laparoscopic hysterectomies, there were 145 operative laparoscopy procedures. We also performed 149 operative hysteroscopies and 248 cystoscopies. There were also 73 surgical sterilizations. At the Jeanes Campus there were 371 gynecologic surgical procedures. This included 24 abdominal hysterectomies, 12 vaginal hysterectomies, 152 operative hysteroscopies, 20 procedures for pelvic floor dysfunction, 36 surgical sterilizations and 75 operative laparoscopies. The full-time faculty also performs surgical procedures at Holy Redeemer Hospital, and Chestnut Hill Hospital. In FY22, 17 robotic-assisted hysterectomies and 10 major open cases (laparotomy) were performed by our faculty at Chestnut Hill Hospital and 21 major cases at Holy Redeemer Hospital (4 robotic-assisted, 5 straight laparoscopies and 12 open hysterectomies).

Third-year Ob/Gyn residents spent two 4-week blocks at the Fox Chase campus where they enhance their educational experience by being exposed to more surgical cases and to the care of hospitalized patients with complex medical situations. In FY22, 641 operations were performed by the gynecologic oncologists at the Fox Chase Cancer Center. Of these, 408 were major surgical procedures to include 71 abdominal hysterectomies, 167 laparoscopic assisted hysterectomies and 21 robotic-assisted total laparoscopic hysterectomies.

A total of 2325 surgical procedures were performed by Temple Health gynecologists in FY22.

## II. FACULTY

### A. SUMMARY (as of September 2022)

Enrique Hernandez, MD, FACOG, FACS  
J. Robert Willson Professor and Chairman

#### 1. *Clinical Faculty*

##### Division of Gynecologic Oncology

Karen L. Houck, M.D., (Professor), Director  
Enrique Hernandez, M.D. (Professor)

##### Division of Maternal-Fetal Medicine

Wadia Mulla, M.D. (Associate Professor), Director  
John (Jack) FitzSimmons, M.D. M.B.A. (Associate Professor)  
Laura Hart, M.D. (Assistant Professor)  
Emily Oliver, M.D. (Assistant Professor)  
Dimitrios Mastrogiannis, MD (Adjunct Clinical Professor)

##### Division of Reproductive Endocrinology and Infertility

Arthur Castelbaum, M.D. (Adjunct Assistant Professor), Co-director  
Martin Freedman, M.D. (Adjunct Assistant Professor), Co-director  
Jeffrey Thorne, MD (Adjunct Assistant Professor)  
Karen Wheeler, MD (Adjunct Assistant Professor)

##### Urogynecology and Pelvic Reconstructive Surgery

Carol Glowacki, M.D. (Associate Professor), Director

##### Division of Gynecology & General Obstetrics

Arleen Ayala, M.D. (Associate Professor), Director  
Gabriela Algarroba, M.D. (Assistant Professor)  
Janhavi Arun, M.D. (Assistant Professor)  
Tanise Branche, M.D. (Assistant Professor)  
Divya Chillapalli, M.D. (Assistant Professor)  
Bruce Carnivale, D.O. (Assistant Professor)  
Julee Choi, M.D. (Assistant Professor)  
Kylee Clyatt, M.D. (Assistant Professor)  
Amy Cruz, M.D. (Assistant Professor) Quality & Safety Officer  
Anagha Desai, M.D. (Adjunct Clinical Assistant Professor)  
Gloria Diaz, M.D. (Adjunct Assistant Professor)  
Shaliz Dolan, M.D. (Associate Professor)  
Michelle Duncan, M.D. (Associate Professor)  
Isabel S. Eisner, M.D. (Assistant Professor)  
Justin Gamez, M.D. (Assistant Professor)

Gail Herrine, M.D. (Professor)  
Jessie Huff, D.O. (Assistant Professor)  
Stacey Jeronis, M.D. (Professor), Associate Chair  
Zeynep Koc, M.D. (Assistant Professor)  
Yasmin Korayem, M.B.B.Ch. (Assistant Professor)  
Melissa Landon, CNM (Adjunct Clinical Instructor)  
Bruce Mabine, M.D. (Adjunct Clinical Assistant Professor)  
Deslyn Mancini, M.D. (Adjunct Clinical Assistant Professor)  
Faith Pullinger, M.D. (Adjunct Clinical Assistant Professor)  
Marisa Rose, M.D. (Professor), Vice-Chair for Education  
Nishanth Sidduri, M.D. (Adjunct Clinical Assistant Professor)  
Samantha So, M.D. (Assistant Professor)  
Debra Somers, M.D. (Assistant Professor)  
Henry Su, M.D. (Adjunct Clinical Assistant Professor)  
Gail Sullivan, M.D. (Assistant Professor)  
Clinton Turner, M.D. (Adjunct Clinical Assistant Professor)  
Anna Zelivianskaia, M.D. (Assistant Professor)

Research

Sarmina Hassan, MBBS., PhD (Adjunct Assistant Professor)  
Yukiko Washio, PhD (Adjunct Clinical Assistant Professor)

**Subtotal: 46**

3. *Secondary Appointments*

Department of Internal Medicine

Sharon Herring, M.D. (Associate Professor)

Fox Chase Cancer Center, Behavioral Medicine

Suzanne Miller, PhD (Adjunct Professor)

**Subtotal: 2**

4. *Fox Chase Cancer Center Clinical Faculty*

Stephen Rubin, M.D. (Adjunct Professor), Chief Gynecologic Oncology  
Christina Chu, M.D. (Adjunct Professor)  
Stephanie King, M.D. (Adjunct Associate Professor)  
Gina Mantia-Smaldone, M.D. (Adjunct Associate Professor)

**Subtotal: 4**

5. *Adjunct Faculty*

Capital Health (NJ)

Holy Redeemer Hospital  
Lancaster General Hospital  
Main Line Health Network  
St. Luke's Health Network

**Subtotal: 29**

**Total Number of Faculty: 81**

## **DIVERSITY AND FACULTY DEVELOPMENT**

There are 30 full-time faculty members in the department of which 4 (13.3%) identified themselves as men 26 (86.7%) as women, 5 (16.6%) are Latino and 3 (10%) are African American.

In FY22, we continued to improve our faculty development curriculum with the addition of new topics and events including:

- Diversity, Equity, and Inclusion Lecture Series and Workshops
  - Implicit Racial Bias in Birthing and Reproductive Care
  - Birthing Without Bias: Centering the Lived Experience to Improve Quality and Safety for Black and Brown Birthing People
  - The Path to Optimal Black Maternal Heart Health: Comparing Two CVD Risk Reduction Interventions
- Quality and Safety Lecture Series:
  - NSQIP and Surgical Quality Improvement
  - The Role of the 302 in the Medical Hospital
  - Outpatient Cardiac Risk Stratification for Non-Cardiac Surgery
  - Enhanced Recovery After Surgery (ERAS)
  - 9<sup>th</sup> year of Faculty-mentored QA/QI Projects
  - 4th year of Faculty – mentored QA/QI Research Symposium
- Perinatal Substance Disorder Trainings:
  - How to Approach Screening and Testing Pregnant Patients for Substance Abuse
  - Fetal Alcohol Spectrum Disorders Prevention Program
  - Management of Opioid Withdrawal and Overdose



- Practice Changing/State-of-the Art of Medicine in OBGYN Lecture Series:
  - The Unexpectedly High Unintended Pregnancy Rate in the US and the Opportunity for New Long-lasting Forms of Reversible Contraception
  - The New, the Old, and the Complicated. What an ID Doc Wants Her Ob/Gyn Colleagues to Know
  - Preventing the First Cesarean Section
  - Pediatric and Adolescent Gynecology Pearls
  - Updates in HIV in Pregnancy
  - Uterine Fibroids: Update and New Treatments and Technology
  - Eggs and Sperm from a Buccal Smear
  - Analysis of Homologous Recombination Repair Proteins in BRCA 1/2 Mutant Ovarian Cancers
  - Updates in REI
- Faculty Wellness Series:
  - Strategies for Physician Wellness
  - Faculty Professional Development/Wellness – a 3-part series led by a professional coach
- Faculty as Teachers (Education Development):
  - Using Feedback and Narrative Assessment to Advance Learning
  - The F-bomb – Giving Summative Feedback in the OB/GYN Clerkship
- Journal Club – quarterly presentations
- M+M – monthly presentations
- Wellness Committee
  - advocates for changes to reduce moral injury and burnout within the department

For FY23, we will continue our robust faculty development curriculum addressing diversity, inclusion, research, quality, safety, wellness, and education.

## **RESIDENT AND FACULTY WELLNESS**

Resident and faculty wellness continue to be a top priority of our department. The residents continue to enjoy participating in the American College of Obstetricians and Gynecologists (ACOG) Wellness Week and our Annual Resident Team Building Retreat. During the retreat the faculty cover all in-house and outpatient duties so that all residents can attend. We continue to carve out regularly assigned protected free time for residents and faculty to use for personal needs such as appointments and obligations that need to be done during work hours. All residents are given the opportunity and are encouraged to seek out preventive and acute health care as needed, including during their working hours.

In addition to our departmental resident retreat, the residents also participated in the annual Spring the Trainees wellness time sponsored by the graduate medical education (GME) office. This was a huge success for both wellness and team building amongst the residents.

We supported and encouraged a resident member to participate in the GMEC Wellness Sub-committee to act as the resident champion for the department.

The faculty and residents were encouraged to explore and utilize the system-wide resources such as Carebridge/EAP. The wellness resources were regularly shared with the department. The hospital system had two sponsored wellness lectures in the fall and spring. All were encouraged to attend.

The Department of OB/GYN faculty wellness committee continues to meet and addresses issues leading to faculty fatigue and burn out. These issues are shared with administration and leadership to find creative ways to address and combat burn out. This has been well received and new initiatives and action plans have been developed to address the wellness needs of the department.

For both the faculty and residents we continue to have regularly scheduled grand rounds sessions addressing well-being as well as encouraging faculty and residents to participate in the institutional sponsored wellness grand rounds.

### **Departmental Wellness Grand Rounds - Strategies for Physician Wellness**

March 16, 2022

Dr. Roschanak Mossabeh

### **Resident Professional Development/Wellness**

Wed, March 30, 2022 8:30am – 9:30am

Joel Fish, PhD

### **Fall Wellness Lecture– Shining a Light on Burnout in Medicine**

Nathalie Martinek, PhD

**Spring Wellness Lecture** - Problems: A Philosophical and Historical Exploration of Why We Spend So Much Time On Notes ... And Whether Any of It Even Matters

**Resident Retreat** – Pinnacle Paintball Park, 9/24/21

**GME Spring the Trainees**, 5/20/22



**B. NEW FACULTY**

Gabriela Algarroba, MD

Dr. Algarroba joined our faculty in August 2022 after completing residency in obstetrics and gynecology at NYU Long Island School of Medicine. She is a

graduate of the University of Pittsburgh School of Medicine. She completed undergraduate studies (BS) at University of Florida.

#### Janhavi Arun, MD

Dr. Arun joined our faculty in September 2022. She received a Bachelor of Science (Psychology) degree from the University of Illinois at Urbana-Champaign. She went on to receive a Master of Medical Arts degree from the Rosalind Franklin University of Medicine and Science in Chicago. She graduated from the Chicago Medical School at Rosalind Franklin University. She completed a residency in obstetrics and gynecology at Henry Ford Health System/Wayne State University School of Medicine in Detroit.

#### Amy Cruz, MD

Dr. Cruz joined our faculty in July 2022. She received a Bachelor of Sciences degree from Westminster College, New Wilmington, PA. She is a graduate of Drexel University School of Medicine. She completed residency in obstetrics and gynecology at Lankenau Hospital just outside of Philadelphia. In 2018 she joined the faculty of the Pennsylvania State University School of Medicine and in 2020 she was appointed Vice-chair for Quality in the Department of Obstetrics and Gynecology. Her appointment at Temple includes the position of Quality & Safety Officer, as well as associate director of the Ob/Gyn clerkship.

#### Zeynep Koc, MD

Dr. Koc joined the faculty in September 2022. She received a Bachelor of Sciences degree from Pennsylvania State University, and the MD degree from Marshall University in West Virginia. She completed a residency in obstetrics and gynecology at Pennsylvania State Hershey Medical Center.

#### Yasmin Korayem, MBBCh

Dr. Korayem joined our faculty in August 2022. She is a graduate of Cairo University School of Medicine. She immigrated to the United States in 2017 to work as a laboratory research associate at Yale University. She completed a residency in obstetrics and gynecology at Michigan State University College of Human Medicine, Hurley Medical Center in Flint, Michigan.

#### Anna Zelivianskaia, MD

Dr. Zelivianskaia joined our faculty in August 2022. She received a Bachelors of Sciences degree from the University of Chicago. She is a graduate of the University of Illinois-Chicago College of Medicine. She completed a residency in obstetrics and gynecology at MedStar Washington Hospital

Center/Georgetown University program, as well as a 2-year fellowship in minimally invasive surgery.

C. FACULTY DEPARTURES

Gloria Diaz, MD  
Semi-retired.

Juan J Diaz, MD  
Accepted a faculty position and Section Chief at the University of Miami

Patricia Mattingly, MD  
Moved to Lithoria, GA to join a private practice group

Avita Pahwa, MD  
Accepted a faculty position at the University of California San Diego.

D. HONORS/PRIZES

**Christina Chu, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022  
Oral Examiner American Board of Obstetrics and Gynecology

**Arthur Castelbaum, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Justin Gamez, MD**

Association of Professors of Obstetrics and Gynecology Excellence in Teaching Award and Council of Resident Education in Obstetrics and Gynecology Award for Excellence in Resident Education

**Carol Glowacki, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Martin Freedman, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Gail Herrine, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022  
American College of Obstetricians and Gynecologists Representative to the  
United States Breastfeeding Committee  
Board of Directors, Academy of Breast Feeding Medicine

**Enrique Hernandez, MD**

Board of Directors American Cancer Society, Philadelphia Area  
Board of Directors Philadelphia County Medical Society Pfahler Foundation  
Board of Regents American College of Surgeons (9-year term ended in  
October 2021)  
Listed in Philadelphia Magazine “Top Doctors” 2022

**Karen Houck, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Stephanie A. King, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Deslyn Mancini, MD**

Preceptor Outstanding Service Award  
Physician Assistant Program, Salus University

**Gina Mantia-Smaldone, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022

**Stephen Rubin, MD**

Listed in Philadelphia Magazine “Top Doctors” 2022  
Board of Directors, American Board of Obstetrics and Gynecology

### **III. RESEARCH**

#### A. Research Grants

##### 1. Peer-Reviewed

**Carol Glowacki, MD**

Cervical elongation and risk of recurrent pelvic organ prolapse: A retrospective study. June-2022-present

**Emily Oliver, MD**

Principal Investigator: COVID-19 and Pregnancy Outcomes with Extracorporeal Membrane Oxygenation (CPrO-ECMO) (“Purpose”) Registry study with The University of Texas San Antonio. March 2022-present

**Enrique Hernandez, MD**

Principal Investigator at Temple 17-102: A Phase 2 Study of Single Agent ONC201 in Recurrent or Metastatic Endometrial Cancer: 2018 to June 2022.

Principal Investigator at Temple for Gynecologic Oncology Group clinical trials (per capita funding): July 2000 to present.

**Gail Herrine, MD**

Principal Investigator: Evaluation of a personalized platform to pain management by characterizing opiate use patterns and habit-forming behavior in patients undergoing Repeat Cesarean Section. Sub-Investigator: Laura Hart, MD. Jan 2020 to present

Principal Investigator: Decreasing opioid misuse and habit-forming behaviors following prescription in patients undergoing Cesarean Section. Sub-Investigator: Laura Hart, MD. Sponsor: NIH ON DRUG ABUSE, April 2021 to present

Sub-Investigator: Individual Breastfeeding Support with Contingent Incentives for Low-Income Black and Puerto Rican Mothers. Jun 2018 to Mar 2023. NIH- R01

**Laura Hart, MD**

Principal Investigator for Perinatal Research Consortium (PRC) Grant: “EnCoRe MoMS: Engaging Communities to Reduce Morbidity from Maternal Sepsis.” RO1NIH submitted May 2022

**Marisa Rose, MD**

Principal Investigator: ACE Scores in Pregnancy in an Inner-City Clinic: A Pilot Study. Oct 2020 to present.

Co-Investigator. Partnering with WIC to prevent excessive weight gain in pregnancy, R01DK115939. PI: Sharon Herring, MD. 2018-2023.

**Wadia Mulla, MD**

Principal Investigator for Perinatal Research Consortium (PRC) Grant: Optimization of Management of Type 2 Diabetes Complicating Pregnancy (MOMPOD). Sub-Investigator: Laura Hart, MD. Feb 2018 to July 2022.

Principal Investigator for Perinatal Research Consortium (PRC) Grant: The Genomic Architecture of Pregnancy Loss. Sub-Investigator: Laura Hart, MD, Emily Oliver. NIH, funded from June, 2021- May, 2025

Principal Investigator for Perinatal Research Consortium (PRC) Grant: Modeling informatics data to track maternal risk and care quality. Sub-Investigator: Laura Hart, MD, Emily Oliver. RO1NIH, Funded from 2022- present

Principal Investigator for Perinatal Research Consortium (PRC) Grant: A Dose Escalation Study of Low Dose Aspirin for the Prevention of Recurrent Preterm Birth.” NICHD, Submitted October 2021

2. Commercial/Industrial/Governmental

**Enrique Hernandez, MD**

Principal Investigator: YO39523: A Phase III, Multicenter, Randomized, Study of Atezolizumab Versus Placebo Administered in Combination with Paclitaxel, Carboplatin, And Bevacizumab to Patients with Newly-Diagnosed Stage III or Stage IV Ovarian, Fallopian Tube, or Primary Peritoneal Cancer. Sub-Investigator: Dr. Karen Houck. Oct 2017 to Sept 2022.

Principal Investigator: ZN-c3-004: A Phase 2 Open-Label, Multicenter Study to Evaluate Efficacy and Safety of Zn-C3 In Adult Women With Recurrent or Persistent Uterine Serous Carcinoma ("Study"). Sub-Investigator: Dr. Karen Houck. June-2022-present

**Gail Herrine, MD**

Sub-Investigator: Develop a comprehensive mHealth app called Multi-modal Intervention for Lactation Care (MILC) to assist Hispanic Women to breastfeed. NATIONAL INSTITUTE ON MINORITY HEALTH AND HEALTH DISPARITIES (NIMHD). June 2021- present

Principal Investigator: Prenatal Expression of Breastmilk to Help Increase Initiation and Exclusive Breastfeeding Rates. Jan 2020 to present

Principal Investigator: Focus Groups for Breastfeeding and Prenatal Hand Expression of Breastmilk. Jan 2020 to June 2021

**Laura Hart, MD**

Principal Investigator: ADVIA Centaur® Systems Preeclampsia Assays OUS Clinical Trial Specimen Collection Protocol. (SIEMENS). Sub-Investigator: Dr. Wadia Mulla, Dr. Emily Oliver. Nov 2020 to present.

Principal Investigator: C3671008: A Phase 3, Randomized, Double-Blinded, Placebo-Controlled Trial to Evaluate the Efficacy and Safety of a Respiratory Syncytial Virus



(RSV) Prefusion F Subunit Vaccine in Infants Born to Women Vaccinated During Pregnancy (Pfizer). Sub-Investigator: Dr. Wadia Mulla, Dr. Emily Oliver  
Nov 2020 to present.

EASE: A randomized, controlled study to EvAluate the Safety and Effectiveness of the Materna Prep Device to pre-stretch (i.e., dilate) the vaginal canal and pelvic floor muscles in preparation for vaginal delivery (Materna Prep Device Pivotal Trial). Sub-Investigator: Dr. Wadia Mulla, Dr. Emily Oliver  
Jan 2022 to present.

### **Wadia Mulla, MD**

Co-Investigator for PATH Grant: COVID-19: Maternal and Child Health Outcomes in Diverse Pennsylvania Communities. Site PI: Anuradha Paranjape, MD. Sub-Investigator: Laura Hart, MD, Emily Oliver. Pennsylvania Department of Health grant funded from June 1, 2021- May 31, 2025

Co-Investigator: The Path to Optimal Black Maternal Heart Health: Comparing Two CVD Risk Reduction Interventions. Site PI: Sharon Herring, MD. Co-Investigator: Dr. Gail Herrine. PCORI Grant funded from Nov 2021-Nov 2026

### **Resident/Student Research**

Analysis of treatment protocols for endometrial carcinosarcoma on clinical outcomes in high-risk populations. Feb 2018-present

Barriers to health in the Hispanic community of Philadelphia compared to African-Americans. Feb 2020-present

Incidence of Gestational Diabetes and Preeclampsia in Obese Pregnant Women Prescribed Prophylactic Metformin versus No Intervention. June 2021-ACE Scores in Pregnancy in an Inner-City Clinic: A Pilot Study. Oct 2020-present

Maternal Barriers to Postpartum Glucose Testing Follow Up in patients with Gestational Diabetes during Pregnancy. May 2020-present

Investigation of specific risk factors leading to peri-partum Venous Thromboembolism. July 2019-present

Knowledge, attitudes, and beliefs of Human Papilloma Virus Vaccine among women in a colposcopy (cervical dysplasia) clinic. Dec 2020-present

B. Total Research dollars expended:	\$148,817
Total Service grant dollars expended:	\$438,135 (Family Planning Title V, X and XX programs)

#### D. Journal Reviewers/Editorial Board

American Journal Obstetrics and Gynecology  
Obstetrics and Gynecology  
Gynecologic Oncology (Dr. Rubin is Deputy Editor; Dr. Chu is on the Editorial Board)  
International Journal of Gynaecology and Obstetrics  
European Journal of Obstetrics, Gynecology and Reproductive Biology  
Obstetrics and Gynecology International (Editorial Board, Dr. Hernandez)  
Topics in Obstetrics and Gynecology (Editorial Board, Dr. Hernandez)  
International Journal of Gynecologic Cancer  
Medical Journals, Gynecology and Obstetrics: Open Access (Editorial Board, Dr. Hernandez)  
Translational Behavioral Medicine (Editorial Advisory Board, Dr. Hernandez, Dr. Miller, editor)  
Surgery (Hernandez)  
Journal of Obesity  
Military Medicine (FitzSimons)  
European Journal of Gynaecologic Oncology (Dr. Hernandez, Editor-in-Chief)  
PLoSOne  
Gynecologic Oncology Reports  
Student Run Clinics (Cruz)  
AAGL meeting abstracts (Eisner)  
APGO/CREOG abstracts (Jeronis)  
Addictive Behavior (Washio)  
Journal of AIDS (Washio)  
Journal of Perinatology (Washio)  
Drug and Alcohol Dependence (Washio)  
American Journal of Health Promotion (Washio)  
Journal of Women's Health (Washio)

## IV. TEACHING PROGRAM

### 1. Medical Students

This program is directed by Dr. Marisa Rose with Dr. Justin Gamez and Dr. Shaliz Dolan as the Associate Clerkship Directors. In July 2022 Dr. Gamez transitioned to clerkship director and Dr. Amy Cruz as associate director. The site program directors contribute to program development, and other related matters. The final examination is given in the standardized format (shelf-exams). On the USMLE part 1 and 2CK most of our students performed statistically about the same or higher on obstetrics, gynecology and reproductive sciences subjects in relation to the national group of first-time examinees from LCME-accredited schools

**Clinical Affiliates Used for Teaching Medical Students**

<b>Campus</b>	<b>Director</b>
Temple	Dr. Marisa Rose/Dr. Justin Gamez
Holy Redeemer	Dr. Lauren Maher
Lancaster	Dr. Kathryn Abello
Main Line	Dr. Catherine Bernardini
St. Luke's	Dr. James Anasti
Crozer	Dr. Alison Rodriguez
Capital Health	Dr. Daniel Berger

a) Program Accomplishments:

1. In FY22, the continued pandemic dictated the need for innovation, flexibility and creativity during which the faculty, residents and students all succeeded in providing a robust educational experience despite changes to normal patient care.
2. In FY22, in conjunction with the St. Luke's campus, the LKSOM preclinical reproductive sciences curriculum was restructured for optimization of hybrid learning and augmented in-person workshops.
3. In Spring FY22, a new intersession was developed to introduce the students to the field of clinical OBGYN and provide them with the foundation for success in the clerkship.
4. In FY22, students benefited from the state-of-the-art web-based learning module that was developed by one of our MS-4 students. The module was posted to Canvas to train the MS-3 Clerkship students on interpreting and treating fetal heart tone patterns. Canvas links also continue to provide access to the outstanding educational and training modules on Domestic Violence for Medical Professionals, pelvic anatomy and vaginal deliveries. The web-based self-study modules and practice questions provided by the Association of Professors of Obstetrics and Gynecology are available to all our students.
5. In FY22, the department continued to offer exclusive LKSOM videos to introduce students to the steps of a vaginal delivery and the well woman exam.
6. In FY22, the Canvas site was again updated to provide a central clearinghouse for all students enrolled in the MS-3 Ob/Gyn Clerkship. Links to the course syllabus, clerkship objectives, orientation training, educational materials, lecture slides, and online learning modules ensure comparability in student education between sites.

7. A longitudinal faculty outpatient experience for the MS-3 clerkship was piloted in 2015 and rolled out in 2016 and continues to be a success in 2021-22. Faculty members from the Lewis Katz School of Medicine at Temple University participate at multiple office sites. In Spring FY 22 we extended this popular program to Jeanes Hospital with outstanding reviews.
8. In FY22 all didactic sessions were continued via videoconference to allow for more student participation from distant clinical sites. Faculty members from LKSOM lead the core lecture series every Friday afternoon.
9. Nine LKSOM students from the 2022 graduating class were accepted into an Obstetrics and Gynecology residency in 2022. Eight were accepted into a categorical (C) position and one student matched in a preliminary (P) spot. An additional two students from the class of 2021 were accepted to a categorical Ob/Gyn residency position.

1	Hosp Univ of PA (C)
2	U Miami (C)
3	ISMMS Mount Sinai West (C)
4	St Luke's (C)
5	NYU (C)
6	Westchester Medical (C)
7	Flushing (C)
8	TUH (C)
9	Virtua (C)
10	TUH (P)
11	Anne Arundel Med Ctr (C)

b) Program Course Offerings:

The following electives are available at Temple University Hospital and other LKSOM affiliates:

- i) Temple University Hospital:
  - Gynecologic Oncology
  - Maternal Fetal Medicine
  - Obstetrics and Gynecology Sub-internship
  - Urogynecology
  - Family Planning and Policy
- ii) Holy Redeemer Hospital:
  - Reproductive Endocrinology & Infertility
- iii) St. Luke's Hospital:
  - Maternal Fetal Medicine
  - Gynecologic Oncology
  - Urogynecology
  - Obstetrics and Gynecology Sub-internship
- iv) Fox Chase
  - Gynecologic Oncology

2. Department of OB/GYN/RS's Involvement with Other Professional Programs

- a. Internal Medicine residents of Temple University Hospital residency program spend time in our clinics. Emergency Medicine residents spend time in the labor and delivery unit.
- b. Training site for University of Pennsylvania Master of Genetic Counseling program.
- c. Temple University Physician Assistant Program. Students are integrated into the medical clerkship through an innovative curriculum supporting inter-professional education and collaboration.
- d. Clinical training site for nurse practitioner students from Temple University's doctor in nursing program

3. Fellowship training

Fellowship Program in Gynecologic Oncology

Our fellowship program is entering its eighth year. Christina Chu, MD, the Program Director, receives assistance from Karen Houck, MD. The fellowship spans the campuses of Temple University Hospital-Main Campus and Temple Health Fox Chase Cancer Center, combining the resources of a busy inner city academic hospital with an NIH-designated comprehensive cancer center to provide excellent and diverse educational experience for the fellows. We accept one fellow each year through the ACGME match. The program is 3 years in duration, with the first year being dedicated to research activities. The second and third years of the fellowship consist of monthly clinical rotations divided between the Fox Chase and Temple-Main campuses. In addition to surgical cases and in/outpatient gynecologic oncologic care, fellows participate fully in the prescribing and monitoring of chemotherapy, as well as consultation and planning for radiation therapy. Two off-service rotations on the Gastrointestinal Surgery Service at Fox Chase and the Surgical Intensive Care Unit at Temple-Main round out the fellows' clinical training.

The Fellows have protected didactic lectures once a week on average. In addition, they are the primary presenters at weekly Tumor Boards at both Temple-Main and Fox Chase. Our site Divisions have monthly joint tumor board as well as quarterly joint journal clubs.

Our 2022 graduate, Dr. Amaranta Craig, accepted a position at a busy practice in Albuquerque, NM. In addition to completing a laboratory project in the lab of Dr. Denise Connolly examining lineage tracing for novel transgenic mouse models of ovarian cancer; she also composed a thesis using national data base data evaluating trends in primary treatment of advanced ovarian cancer. Our rising senior fellow is Dr. Erica

Huelsmann. She completed her residency at Georgetown University/Washington Hospital Center. She completed her research year in the laboratory of Dr. Neil Johnson; developing projects analyzing DNA repair protein expression in BRCA1 and BRCA2 mutant breast and ovarian cancers. She won the ASCO Merit Award in 2022 for her work. Our second-year fellow is Dr. Arielle Weiss, who comes to us from the University of Washington. She, too, spent her research year working with Dr. Johnson. Her project uses a genetically engineered mouse model of ovarian cancer to study the impact of BRCA mutations on the development of ovarian cancer, specifically looking at timing of tumor development, sites of metastases and BRCA protein expression within tumors. Finally, our incoming fellow, Dr. Jason Conger, is from Magee Women's Hospital in Pittsburgh. Like his most recent predecessors, he will be pursuing research in Dr. Johnson's laboratory.

Temple residents and medical students spend time at Fox Chase. In addition, fourth year medical students can do a gynecologic oncology elective at Fox Chase. Fox Chase Cancer Center provides our medical students with a worthwhile choice for their core and sub-internship rotations. For residents, the goal is to enhance their educational experience by providing more surgical cases and exposure to the care of complex inpatients, and also to build the fellows' leadership and teaching abilities as they supervise the junior housestaff and students in the inpatient, as well as operative settings.

## 4. Residency Program



templeobgyn\_residency  
Student Faculty Center



### Leadership

Dr. Stacey Jeronis is going into her 11<sup>th</sup> year as the Program Director of the Obstetrics and Gynecology residency program. This brings a great deal of stability within the leadership of the program while allowing for constant change and growth within the residency program itself. Our program is fully accredited and consistently remains citation free with the annual RRC review.

Dr. Marisa Rose acts as the Associate Program Director and Vice Chair of Education. She remains responsible for the educational curriculum and organizing the educational conferences. She also served as the student clerkship director and has been recently appointed to Assistant Dean Phase 3 in LKSOM.

Dr. Tanise Branche acts as the Associate Program Director with emphasis on clinical affairs and development. Dr. Branche is an enthusiastic clinical educator and is involved in their weekly conference didactic series. She also serves as the Chair of the Departmental DEI committee as well as the Physician Liaison for the Midwifery service.

Dr. Arleen Ayala is the Director of our General Ob/Gyn Division, as well as the Director of our clinical simulation program with monthly educational sessions in the simulation center. Dr. Kylee Clyatt will assume this role in FY23.

Dr. Divya Chillapalli is the director of our Fundamentals of Laparoscopic Surgery (FLS) training and certification and also serves as the lead on our oral board preparatory review sessions.

Dr. Christian Chu, who is based at Temple Health Fox Chase Cancer Center is the Director of the Gynecologic Oncology fellowship and Dr. Karen Houck, who is based at the Temple University Hospital-Main Campus is the Associate Program Director.

Our residency is a competitive fully approved 4-year program. We are approved to have six residents at each level plus a 7<sup>th</sup> non-categorical (preliminary) intern. In regards to recruitment, we continue to attract top tier applicants. We received approximately 1100 applications for our six positions and interviewed 87 highly qualified diverse applicants. We continue to match in the top quarter of our rank list with a diverse and accomplished group of students.

### **Clinical Experience**

At Temple University Hospital the OB/GYN residents rotate through Obstetrics, Maternal-Fetal Medicine, Gynecology, Urogynecology, Night Float and Gynecologic Oncology. At Fox Chase Cancer Center and Jeanes campus they gain additional experience in Gynecologic Surgery (with emphasis in minimally invasive gynecologic surgery).

The residents also gain subspecialty training in Reproductive Endocrinology and Infertility at RMA Philadelphia with Drs. Castlebaum and Freedman. Exposure to family planning services and pregnancy terminations occurs at Temple University Hospital-Main Campus and at the Philadelphia Women's Center.

### **Program Quality and Assessment**

We continue to monitor the quality of our program through both the resident and faculty anonymous surveys administered by the ACGME as well as anonymous internal audits annually. We consistently score above the national mean for the specialty in the areas of Resources, Professionalism, Patient Safety and Teamwork, Faculty Teaching and Supervision, Evaluation, Educational Content, Diversity and Inclusion and Clinical Experience and Education. We use these surveys to make continued yearly adjustments and improvements to the program. We appreciate and encourage the input and feedback from both residents and faculty to continually promote growth and change within the department for constant improvement.

We also monitor the quality of our program and curriculum by the in service exam and board pass rates which have been consistently above average.

### **Structured Educational Sessions**

Protected and formal didactic education is held every Wednesday morning from 7:30am to 10:30am. During this time, we have regularly scheduled Grand Rounds, Morbidity and Mortality Review, Journal Club, and Case Presentations first hour. Followed by ACOG practice bulletins and Chapter reviews from standard textbooks. Simulation sessions are built



into this schedule once per month with a comprehensive curriculum.

Other educational sessions include: Gynecology Tumor Board which meets every Wednesday from 10:30am to 12:00pm, Chairman's rounds on Tuesdays at 7:00am, and weekly gynecology oncology review session every Friday morning with Dr. Hernandez.

### **Research**

On December 8, 2021, we held our 61<sup>st</sup> Annual Rose & Isador Forman Post Graduate Course which is funded by the Forman family. Our visiting lecturer was Eli Adashi, MD, Professor of Medical Science and Former Dean of Medicine and Biological Sciences, Brown University presented "Eggs and Sperm from a Buccal Smear".

### **Graduating fellow and residents presented their research theses:**

#### **Erica Huelsmann, MD (fellow)**

Analysis of homologous Recombination Repair Proteins in BRCA1/2 Mutant Ovarian Cancers

#### **Tiffany Gee, MD – mentor Dr. Wadia Mulla**

Incidence of Gestational Diabetes and Preeclampsia in Obese Pregnant Individuals Prescribed Prophylactic Metformin versus No Intervention in an Urban Hospital Setting

#### **Sravanthi Gutta, MD – mentor Dr. Gail Herrine and Dr. Laura Hart**

Evaluation of a mobile application to assess opioid misuse and habit-forming behavior following prescription: A Feasibility Study

#### **Alexandra Lebental, MD – mentor Dr. Enrique Hernandez and Dr. Karen Houck**

Lymph node dissection at the time of minimally invasive hysterectomy for uterine cancer is associated with a higher incidence of venous thromboembolism: An analysis of the American College of Surgeons National Surgical Quality Improvement Program (NSQIP) database.

#### **Angela Liu, MD – mentor Dr. Gail Herrine**

Prenatal Hand Expression of Breastmilk to Help Increase Initial and Exclusive Breastfeeding Rates

#### **Richa Pursnani, MD – mentor Dr. Julie Choi**

Post Hysterectomy Outcomes in Patients with Iron Deficiency Anemia Preoperatively Treated with Intravenous Iron

**Dr. Alexandra LeBental was the recipient of the *Best Resident Research Award for 2022.***

**Quality and Performance Improvement Program**

We have a robust Quality and Performance Improvement program. One-hundred percent of our residents participate in a team-approach quality improvement project each year and it is currently a requirement for the PGY 4 residents to successfully complete and present at our educational conference prior to graduation.

We continue to incorporate aspiring medical students interested in entering obstetrics and gynecology as a career along with a faculty mentor into the team. There is an expectation that these projects will be submitted for conference presentations many of which have been accepted for presentation at national conferences.

**Quality and Performance Improvement Projects FY 2021-22:**

Topic* 2021 *titles subject to change	Opioid withdrawal medication training	PP COVID Vaccines	Shoulder Dystocia Drills	Effectiveness of uterine manipulator simulation on resident performance in the OR	Streamlining PATs
PGY 4	Richa Pursnani	Angela Liu	Srav Gutta	Tiffany Gee	Alex LeBental
PGY 3	Allison Swiecki-Sikora	Melissa Danko	Jennifer Imbriale Corey Johnson	Kelly Harmon	Arielle Caplin
PGY 2	April Dobkin	Marigloria Maldonado Mary Williamson	Ashley Harvard	Annabelle Abdo	Miriam Raffeld
PGY 1	Michelle Benassai Daphney Noel	Sarina Dutta	Claudia Flores	Sara Fuhrman Melanie Levine	Brian Goddard
Mentor	Hart	Branche	Oliver	Eisner	Houck
Students	Schyler Edwards Sruthri Gogimukkula	More Rizk Kendall Hamilton	Bianca Albudefefe Anne Kearney	Amanda Pirola Christina Julian	Hannah Schwartz Paige Palumbo Grace Amadio

**Academic profile**

We encourage faculty and residents to participate in scholarly activities and research within our department and hold monthly research meetings to help facilitate this process. There is significant scholarly activity among residents with several publications in peer-reviewed journals and multiple presentations at national meetings.

**Resident and Fellow PRESENTATIONS Academic year July 1 2021 to June 30, 2022**

**Aioub M, Gee T, Mutter O, Harmon K, Abdo A, Prescott S, Zhao H, Diaz J, Ayala-Crespo A.** Development and implementation of a robotic surgery training curriculum (poster). American Association of Gynecological Laparoscopists (AAGL) Global Congress. Austin, TX, Nov 2021.

**Craig AD**, Deng M, Handorf E, **Mantia-Smaldone G**, **Chu C**, **Ray J**, **Huelsmann E**, Jain A. Trend in primary treatment of advanced ovarian cancer: a real world national database analysis. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Swiecki-Sikora A**, Harris A, Lauder A, Deng M, Tagai E, **Jeronis S**, **Houck K**, **Miller S**, **Hernandez E**. Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E**, Kraus J, **Chu C**. Analyses of DNA repair protein expression in BRCA mutant ovarian cancer. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E**, **Craig A**, **Ray J**, **Chu C**, **Mantia-Smaldone G**. Tumor testing at an NCI designated cancer center: who are we missing? Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Swiecki-Sikora A**, Harris A, Lauder A, Deng M, Tagai E, **Jeronis S**, **Houck K**, **Miller S**, **Hernandez E**. Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital (poster). SGO 2022 Annual Meeting on Women's Cancer, Phoenix, AZ, March 18-21, 2022.

**Lebental A**, **Hernandez E**, **Houck K**, **Ackroyd S**. Lymph node dissection for uterine cancer is associated with a higher incidence of venous thromboembolism (poster). 2022 ACOG Annual Clinical and Scientific Meeting, San Diego, CA, May 7, 2022.

**Liu, A**, Chen, S, **Herrine, G**, **Washio, Y**. Prenatal hand expression of breastmilk to help increase initial and exclusive breastfeeding rates. Poster presentation. Academy of Breastfeeding Medicine Annual Conference, Schaumburg, IL, October 2021.

### **Resident and Faculty Publications July 1, 2021 to June 30, 2022**

**Lebental A**. Lymph node dissection for uterine cancer is associated with a higher incidence of venous thromboembolism (abst). *Obstet Gynecol* 2022 (May);139:33S.

Taylor GA, Oresanya LB, King SM, Saxean V, **Mutter O**, Raman S, Cho EY, Deitrick P, Philp M, **Sanserion K**, Kuo LE. Rethinking the routine: preoperative laboratory testing among American Society of Anesthesiologist class 1 and 2 patients before low-risk ambulatory surgery in the 2017 National Surgical Quality Improvement Program cohort. *Surgery* 2022 (Feb);171:267-274.

**Aioub M**, **Craig A**, **Houck K**, **Hernandez E**. Molecular sequencing patterns for stage I serous endometrial carcinoma tumors with early recurrence versus those without early recurrence (abst). *Gynecol Oncol* 2021 (Jul);162:S207.

## **Residency Program at a Glance**

We continue with ACGME Full Accreditation for our 24 categorical and 1 preliminary position. We continue to work hard to not only educate and train future obstetricians and gynecologists but we also strive to find the perfect life work balance.

## **Future Plans**

Our top priorities in the department continue to be resident education in a caring and supportive environment. The sixth annual resident retreat is scheduled for October 2022. During this retreat the residents will focus on team building, conflict resolution as well as mindfulness to enhance their overall educational experience both clinically and professionally.

This will be done in a safe social distancing format. We continue to support and promote the ACOG annual wellness week with daily activities to promote intellectual and emotional health which has evolved into an annual curriculum.

Residents also participate in the GME initiative, “Spring the Trainees” where they have a designated half day off either to participate in a planned wellness activity or foster one’s individual wellness.

## **2022 Clinical Considerations lecture series**

The educational experience of our residents is strongly rooted in their clinical rotations and augmented by our Wednesday educational lecture series. Our residents continue to have a three-hour block of dedicated educational time for grand rounds and educational lecture series. This year we will continue with the series titled ‘Clinical Considerations’.

Each session, residents practice verbalizing their clinical assessment, counseling and management plans in reference to patients in structured cases presented to them. This lecture style format fosters excellent attending and resident group discussion on current ACOG guidelines. The success of this program is demonstrated in our continued above average scores on our national in-service CREOG examination and board pass rate.

## **Health Equity and Diversity**

Temple’s Obstetrics and Gynecology residency program recognizes the enlarging gap of health inequity in our underserved community and is committed to eliminating disparities in women’s health.

One of the first steps to doing this centers around confronting implicit and explicit bias institutionally as well as individually. This means recognizing and examining our own prejudice and bias and addressing the way in which health care systems perpetuate inequality.

We have partnered with Access Matters, a non-profit, public health organization located in Center City Philadelphia, who envisions a future where every person has the health care and information they need to thrive. In service to that vision, Access Matters' mission is to protect, expand, and enhance equitable access to sexual and reproductive health care and information for all people.

In addition, we have multiple training sessions throughout the year:

**Implicit Racial Bias in Birthing and Reproductive Care**

**When** Wed, September 1, 2021, 7:30am – 8:30am  
Shannon Criniti, PhD, MPH & India Blunt

**Birthing Without Bias: Centering the Lived Experience to Improve Quality and Safety for Black and Brown Birthing People**

**When** Wed, December 1, 2021, 7:30am – 8:30am  
Kimberly Seals Allers

**The Path to Optimal Black Maternal Heart Health: Comparing Two CVD Risk Reduction Interventions**

**When** Wed, June 1, 2022 7:30am – 8:30am

Dr. Sharon Herring

**Graduating Residents and Fellow June 2021**



<p align="center"><b>Sravanthi Gutta, MD</b> Obstetrics &amp; Gynecology Faculty Montefiore Medical Center New York</p>	<p align="center"><b>Alexandra Lebental, MD</b> Obstetrics &amp; Gynecology Faculty Montefiore Medical Center New York</p>
<p align="center"><b>Richa Pursnani, MD</b> Private Practice Valley Hospital, NJ</p>	<p align="center"><b>Angela Liu, MD</b> Group Practice Kaiser Permanente Los Angeles, CA</p>
<p align="center"><b>Tiffany Gee, MD</b> Group Practice Kaiser Permanente San Ramon, CA</p>	<p align="center"><b>Amaranta Craig, MD</b> Gynecologic Oncology Practice Presbyterian Medical Group, New Mexico</p>

*Incoming Interns June 2022*



2022 Obstetrics and Gynecology Match List



Sophia Bunde      Thomas Donaldson      Melanie Levine



Ellen Marcus      Lindsay Serwatka      Cameron Thomas      Marisa Wozniak

<p><b>Sophia Bunde, MD</b> University of Pittsburgh</p>	<p><b>Lindsay Serwatka, MD</b> Lewis Katz School of Medicine at Temple</p>
<p><b>Thomas Donaldson, MD</b> Eastern Virginia Medical School</p>	<p><b>Lindsey Thomas MD</b> Lewis Katz School of Medicine at Temple</p>
<p><b>Melanie Levine, MD</b> University of Pittsburgh</p>	<p><b>Marisa Wozniak, MD</b> Cooper Medical School of Rowan University</p>
<p><b>Ellen Marcus, MD</b> Albert Einstein College of Medicine</p>	

## **V. GRAND ROUNDS**

### **GRAND ROUNDS PROGRAM**

**Marisa Rose, MD, Grand Rounds Director**

**Continuing Medical Education (CME) Program 2021-2022**

#### **The Unexpectedly High Unintended Pregnancy Rate in the US and the Opportunity for New Long-lasting Forms of Reversible Contraception**

**When:** Wed, July 7, 2021, 7:30am – 8:30am

**Dr. Brian Bernick (TherapeuticsMD)**

#### **Management of Endometriosis**

**When:** Wed, July 7, 2021, 8:30am – 9:30am

**Dr. Patricia Mattingly**

#### **M&M: Repeat C-Section with Incidental Cystotomy**

**When:** Wed, July 21, 2021, 7:30am – 8:30am

**Dr. Corey Johnson (PGY3)**

#### **Pre-labor Rupture of Membranes**

**When:** Wed, July 21, 2021, 8:30am – 9:30am

**Dr. Divya Chillapalli**

### **CLINICAL SIMULATION LAB**

**When:** Wed, July 28, 2021, 7:30am – 10:30am

**Dr. Arleen Ayala**

#### **The F-bomb – Giving Summative Feedback in the OB/GYN Clerkship**

**When:** Wed, August 4, 2021, 7:30am – 8:30am

**Dr. Marisa Rose**

#### **Ultrasound in Pregnancy**

**When:** Wed, August 4, 2021, 8:30am – 9:30am

**Dr. Arielle Caplin (PGY3)**

#### **M&M – OB Postpartum Hemorrhage**

**When:** Wed, August 11, 2021, 7:30am – 8:30am

**Dr. Melissa Danko**

#### **Induction of Labor**

**When:** Wed, August 11, 2021, 8:30am – 9:30am

**Dr. Arleen Ayala**



### **CLINICAL SIMULATION LAB**

When Wed, August 18, 2021, 7:30am – 10:30am

Dr. Arleen Ayala

### **Benign Diseases of the Vulva**

When: Wed, August 26, 2021, 7:30am – 8:30am

Dr. Enrique Hernandez

### **Shoulder Dystocia/Macrosomia**

When Wed, August 26, 2021, 8:30am – 9:30am

Dr. Nishanth Sidduri

### **Implicit Racial Bias in Birthing and Reproductive Care**

When Wed, September 1, 2021, 7:30am – 8:30am

Shannon Criniti, PhD, MPH & India Blunt

### **Operative Vaginal Delivery**

When Wed, September 1, 2021, 8:30am – 9:30am

Dr. Justin Gamez

### **M&M: GYN Ureter Injury**

When Wed, September 8, 2021, 7:30am – 8:30am

Dr. Arielle Caplin (PGY 3)

### **Prevention and Management of OB Lacerations**

When Wed, September 8, 2021, 8:30am – 9:30am

Dr. Julee Choi

### **NSQIP and Surgical Quality Improvement**

When Wed, September 15, 2021, 7:30am – 8:30am

Dr. Matthew Philp

### **Use of Prophylactic Antibiotics in Labor - Corey Johnson**

When Wed, September 15, 2021, 8:30am – 9:30am

Dr. Corey Johnson (PGY3)

### **Clinical Simulation Lab**

When Wed, September 22, 2021, 7:30am – 10:30am

Dr. Arleen Ayala

### **Journal Club**

When Wed, September 29, 2021, 7:30am – 8:30am

Drs. Annabelle Abdo & April Dobkin (PGY2)

### **Obstetric Analgesia and Anesthesia**

When Wed, September 29, 2021, 8:30am – 9:30am

Dr. Jack Peace

### **The New, the Old, and the Complicated. What an ID Doc Wants Her Ob/Gyn Colleagues to Know**

When Wed, October 6, 2021 7:30am – 8:30am

Dr. Brionna Matt

### **Management of Gyn Issues for Women with Breast Cancer/ Hereditary Breast and Ovarian Cancer**

When Wed, October 6, 2021, 8:30am – 9:30am

Dr. Kylee Clyatt

### **M&M: OB-PROM in a Patient with Cerclage in Place**

When Wed, October 13, 2021, 7:30am – 8:30am

Dr. Corey Johnson (PGY3)

### **Diagnosis and Management of Benign Breast Disorders**

When Wed, October 13, 2021, 8:30am – 9:30am

Dr. Sravanthi Gutta

### **Preventing the First Cesarean Section**

When Wed, October 20, 2021, 7:30am – 8:30am

Dr. Joseph Apuzzio

### **Breast Cancer Risk Assessment**

When Wed, October 20, 2021, 8:30am – 9:30am

Dr. Tanise Branche

### **Clinical Simulation Lab**

When Wed, October 27, 2021, 7:30am – 10:30am

Dr. Arleen Ayala

### **Pediatric and Adolescent Gynecology Pearls**

When Wed, November 3, 2021, 7:30am – 8:30am

Dr. Patricia Rojas

### **Updates in HIV in Pregnancy**

When Wed, November 3, 2021, 8:30am – 9:30am

Dr. Ellen Tedaldi

### **M&M: GYN-Facial Dehiscence After Cesarean Section**

When Wed, November 10, 2021, 7:30am – 8:30am  
Dr. Kelly Harmon (PGY3)

### **Prevention of Infection After Gynecologic Procures**

When Wed, November 10, 2021, 8:30am – 9:30am  
Dr. Isabel Eisner

### **Management of Opioid Withdrawal and Overdoes**

When Wed, November 17, 2021, 7:30am – 8:30am  
Dr. Laura Hart  
\*\*Interview Day\*\*

### **Journal Club**

When Wed, November 24, 2021, 7:30am – 8:30am  
Drs. Ashley Harvard (PGY2) & Miriam Raffeld (PGY2)

### **Diagnosis and Management of Vulvar Skin Disorder**

When Wed, November 24, 2021, 8:30am – 9:30am  
Dr. Nishanth Sidduri

### **Birthing Without Bias: Centering the Lived Experience to Improve Quality and Safety for Black and Brown Birthing People**

When Wed, December 1, 2021, 7:30am – 8:30am  
Kimberly Seals Allers

### **Analysis of Homologous Recombination Repair Proteins in BRCA 1/2 Mutant Ovarian Cancers**

When Wed, December 8, 2021, 7:30am – 8:30am  
Dr. Erica Huelsmann (PGY6 – Gyn Onc Fellow)

### **Isador Forman Lecture – Eggs and Sperm from a Buccal Smear**

#### **Guest Speaker: Dr. Eli Adashi**

When Wed, December 8, 2021, 11:30am – 12:30am

### **How to Approach Screening and Testing Pregnant Patients for Substance Abuse**

When Wed, December 15, 2021, 7:30am – 8:30am  
Sophia Elliot, Legal Fellow (Women's Law Project)  
\*\*Interview Day\*\*

### **University Holiday – Cancelled**

When Wed, December 22, 2021

### **University Holiday - Cancelled**

When Wed, December 29, 2021

### **Gyn Ultrasound Made Simple**

When Wed, January 5, 2022 7:30am – 8:30am

Dr. Adrienne Dade

### **CREOG Review – Updates in Gynecologic Oncology**

When Wed, January 5, 2022 8:30am – 10:30am

Dr. Amaranta Craig (PGY7) & Dr. Arielle Weiss (PGY5)

### **Enhanced Recovery After Surgery (ERAS)**

When Wed, January 12, 2022, 7:30am – 8:30am

Dr. Patricia Mattingly

\*\*Interview Day\*\*

### **CREOG Review – Updates in REI**

When Wed, January 19, 2022 7:30am – 10:30am

Dr. Arthur Castelbaum

### **CLINICAL SIMULATION LAB**

When Wed, January 26, 2022 7:30am – 10:30am

Dr. Arleen Ayala

### **M&M: OB - Capacity Assessments and the Role of the 302 in the Medical Hospital**

When Wed, February 2, 2022 7:30am – 9:30am

Dr. Kelly Harmon, PGY3 (1<sup>st</sup> hour) & Mr. John O'Donnell, Esq. and Dr. Natalia Ortiz (2<sup>nd</sup> hour)

### **M&M: AFE**

When Wed, February 9, 2022 7:30am – 8:30am

Dr. Richa Pursnani (PGY4)

### **Neural Tube Defects**

When Wed, February 9, 2022 8:30am – 9:30am

Dr. Julee Choi

### **Match List**

When Wed, February 16, 2022 7:30am – 8:30am

Dr. Stacey Jeronis

### **CLINICAL SIMULATION LAB**

When Wed, February 23, 2022 7:30am – 10:30am

Dr. Arleen Ayala-Crespo

### **Uterine Fibroids**

When Wed, March 2, 2022 7:30am – 8:30am  
Dr. Arleen Ayala-Crespo

### **Urinary Incontinence**

When Wed, March 2, 2022 8:30am – 9:30am  
Dr. Carol Glowacki

### **M&M: GYN-Management of Post-Operative Wound Infection with Vacuum Assisted Closure**

When Wed, March 9, 2022 7:30am – 8:30am  
Dr. Corey Johnson, (PGY3)

### **Pelvic Organ Prolapse**

When Wed, March 9, 2022 8:30am – 9:30am  
Dr. Avita Pahwa

### **Strategies for Physician Wellness**

When Wed, March 16, 2022 7:30am – 8:30am  
Dr. Roschanak Mossabeb

### **Basic Principles of Laparoscopy**

When Wed, March 16, 2022 8:30am – 9:30am  
Dr. Isabel Eisner

### **CLINICAL SIMULATION LAB**

When Wed, March 23, 2022 7:30am – 10:30am  
Dr. Arleen Ayala

### **Journal Club**

When Wed, March 30, 2022 7:30am – 8:30am  
Drs. Marigloria Maldonado & Mary Williamson (PGY2)

### **Resident Professional Development/Wellness**

When Wed, March 30, 2022 8:30am – 9:30am  
Joel Fish, PhD

### **Fetal Alcohol Spectrum Disorder (FASD)**

When Wed, April 6, 2022 7:30am – 8:30am  
Dr. Elizabeth Krans & Ms. Stephanie Cecil

### **Early Pregnancy Loss**

When Wed, April 6, 2022 8:30am – 9:30am  
Dr. Samantha So

### **M&M– GYN: Post-Operative Gonadal Vein Thrombosis**

When Wed, April 13, 2022 7:30am – 8:30am

Dr. Arielle Caplin

### **LARCs/Emergency Contraception**

When Wed, April 13, 2022 8:30am – 9:30am

Dr. Kylee Clyatt

### **Outpatient Cardiac Risk Stratification for Non-Cardiac Surgery**

When Wed, April 20, 2021 7:30am – 8:30am

Dr. Joseph McComb

### **Vaginitis in the Non-Pregnant Patient**

When Wed, April 20, 2022 8:30am – 9:30am

Dr. Jessie Huff

### **CLINICAL SIMULATION LAB**

When Wed, April 27, 2022, 7:30am – 10:30am

Dr. Arleen Ayala

### **Using Feedback and Narrative Assessment to Advance Learning**

When Wed, May 4, 2022 7:30am – 8:30am

Dr. Maryellen Gusic

### **Management of Abnormal Uterine Bleed Associated with Ovulatory Dysfunction**

When Wed, May 4, 2022 8:30am – 9:30am

Dr. Nishanth Sidduri

### **M&M- Surgery/Interdisciplinary (Erny Auditorium)**

When Wed, May 11, 2022 7:30am – 8:30am

Dr. Allison Swiecki-Sikora and Dr. April Dobkin/Surgery

### **Lynch Syndrome**

When Wed, May 11, 2022 8:30am – 9:30am

Dr. Amaranta Craig (Gyn Onc Fellow)

### **Spring Resident Research Day**

When Wed, May 18, 2022 7:30am – 10:30am

### **CLINICAL SIMULATION LAB**

When Wed, May 25, 2022 7:30am – 10:30am

Dr. Arleen Ayala

**The Path to Optimal Black Maternal Heart Health: Comparing Two CVD Risk Reduction Interventions**

When Wed, June 1, 2022 7:30am – 8:30am

Dr. Sharon Herring

**Too Many Pills Too Little Time**

When Wed, June 1, 2022 8:30am – 9:30am

Dr. Marisa Rose

**M&M: OB-Postpartum Eclampsia and Subsequent Cardiac Arrest**

When Wed, June 8, 2022 7:30am – 8:30am

Dr. Melissa Danko (PGY3)

**Residency Program Review/Welcome Class of 2026 & Thank You Class 2022**

When Wed, June 15, 2022 7:30am – 9:30am

Dr. Stacey Jeronis

**CLINICAL SIMULATION LAB**

When Wed, June 22, 2022 7:30am – 10:30am

Dr. Arleen Ayala

**Advanced Directives in OB**

When Wed, June 29, 2022 7:30am – 8:30am

Dr. Corey Johnson (PGY4)

**Pelvic Anatomy/Introduction to GYN Clinic**

When Wed, June 29, 2022 8:30am – 9:30am

Dr. Marigloria Maldonado-Puebla (PGY3)





Forman family with Dr. Hernandez at the 2022 Forman symposium. Right to Left: Dr. Paul Forman, Dr. Hernandez, Dr. Deborah Diamond, David Diamond.

## **VI. CLINICAL PROGRAMS**

### **A. DIVISIONS REPORT**

#### **1. Gynecologic Oncology**

The Division of Gynecologic Oncology at Temple University Hospital Main Campus counts with two board-certified gynecologic oncologists: Karen L. Houck, MD, FACOG and Enrique Hernandez, MD, FACOG, FACS. The Division counts with two oncology nurses and two part-time medical assistants. In addition to the gynecologic oncologists,



an Ob/Gyn colposcopist staffs the Division's colposcopy clinic. The mission of the Division is to provide comprehensive care to women with malignant and premalignant gynecologic conditions within the Temple Health Care System in partnership with our colleagues at Temple's Fox Chase Cancer Center. At the Cancer Center site there are four board-certified gynecologic oncologists (Drs. Stephen Rubin, Christina Chu, Stephanie King and Gina Mantia-Smaldone). The gynecologic oncologists perform surgery ranging from minimally invasive (including robotic-assisted) to radical surgery (including intestinal and urological). Difficult or high-risk surgery for benign gynecologic pathology is also performed, as well as laser surgery of the lower genital tract.

### Clinical

At Temple University Hospital-Main the Division utilizes two days (Tuesdays and Thursdays) in the operating room for open surgery and 1-2 days (Mondays and Fridays) for robotic-assisted surgery. There are now 3 double console Da Vinci Xi robots at Temple University Hospital-Main Campus and 2 at Fox Chase Cancer Center. There is a robotic surgery training center in the medical school with 2 Da Vinci Si robots. These are available to all trainees. In FY22 we performed 45 robotic-assisted surgical procedures at Temple University Hospital Main Campus, 17 at Chestnut Hill Hospital and 4 at Holy Redeemer Hospital. The Division of Gynecologic Oncology provides outpatient and inpatient chemotherapy for women with gynecologic cancers. Over 300 chemotherapy treatment cycles were administered to women with gynecologic cancer at the Temple University Hospital-Main Campus in FY22. The Division of Gynecologic Oncology cooperates with the radiation oncologists in providing radiation therapy to women with gynecologic malignancies. On any given week there are approximately one-half dozen women receiving radiation therapy for gynecologic malignancies. We perform the placement of the hardware for gynecologic high-dose rate brachytherapy in conjunction with the radiation oncologists. We perform difficult intrauterine implants under ultrasound guidance. Seven Smit sleeves as a conduit for high-dose rate brachytherapy were placed in FY22.

The Division has separate Colposcopy and Tumor Clinics. The Colposcopy Clinic meets on Monday afternoon on the 3<sup>rd</sup> floor of the hospital Zone C. Approximately 12-14 patients are seen at each clinic session. The clinic is staffed by the gynecologic oncologists and by an obstetrician/gynecologist experienced in colposcopy. A weekly multidisciplinary conference reviews colposcopy clinic cases. We also have every other Friday morning session where the senior resident on the oncology service discusses with the patients the Pap smear diagnosis, biopsy results, and treatment plans as established by the Division faculty. In FY19 the Forman family donated colposcopy equipment that allows us to project the field being inspected to large high-resolution monitor and to save the examination images to the patient record. This not only allows for better documentation of the examination, but also greatly facilitates the training of our medical students, residents and fellows. Cryocautery can be used in the clinic to treat cervical dysplasia when appropriate. However, the residents are exposed to all the modern diagnostic and treatment modalities to include laser, LEEP, and conization. The Tumor

Clinic meets on Friday afternoon at the Temple University Hospital-Main Campus Cancer Center (4<sup>th</sup> floor Ambulatory Care Center). This provides the patients who are undergoing cancer therapy with on-site laboratory, pharmacy, social work support, genetic counselling, nutrition evaluation and counselling, and infusion capabilities.

The gynecologic oncologists also see patients in Zone B of Temple University Hospital-Main Campus, one-half day session a week. Even though the bulk of the clinical efforts of the Division are at Temple University Hospital-Main Campus, consultation services are also provided at Holy Redeemer Hospital and at Chestnut Hill Hospital. The Division is able to provide excellent care to over 50 patients each week at the above mentioned sites. There were 190 surgical procedures performed at Temple University Hospital-Main Campus by the gynecologic oncologists in FY22. Of these, 126 were major surgical procedures for gynecologic cancer or suspected gynecologic malignancy. Additional procedures were performed at Chestnut Hill Hospital (27 major surgical procedures, 17 were robotically assisted) and Holy Redeemer Hospital (21 major surgical procedures, 4 were robotically assisted).

### Education

As of the spring of 2017 third-year medical students can elect to spend two weeks on the Gynecologic Oncology Service at Temple University Hospital-Main Campus or at Temple's Fox Chase Cancer Center. At Temple University Hospital-Main Campus teaching/work rounds by the attending staff with the residents and the students are consistently done every day. The students are assigned patients to follow. They present and discuss their patients on rounds. The Division's faculty gives at least two formal lectures to the third-year medical students during each block. The Division Faculty gives at least one grand rounds lecture per quarter. The Division continues to have a weekly multidisciplinary gynecologic tumor board. All active cases are presented and discussed including patients receiving chemotherapy and/or radiation therapy. This is a teaching/working conference with participation of residents and students. On the first Thursday of every month the Division holds a system-wide Tumor Board conference with our colleagues at the Temple's Fox Chase Cancer Center campus.

A senior resident (PGY-4) and a PGY-2 are assigned to a 10- or 8-week rotation on the gynecologic oncology service at Temple University Hospital-Main Campus. Our residents participate not only in the surgical management of women with gynecologic malignancies, but also are involved in chemotherapy management, the placement of hardware for brachytherapy and the surgical and medical management of complications due to the malignancy or its therapy. The residents, students and fellows are assigned two textbook chapters to read each week and a quiz and discussion is held every Friday. Third-year Ob/Gyn residents spent two 4-week blocks at the Fox Chase campus where they enhance their educational experience by exposure to more surgical cases and the care of hospitalized patients with complex medical situations. In FY22 there were over 5000 chemotherapy infusions for the treatment of gynecologic malignancies at Temple's Fox Chase Cancer Center. In FY22, 641 operations were performed by the gynecologic oncologists at the Fox Chase Cancer Center. Of these 408 were major surgical

procedures to include 71 abdominal hysterectomies, 167 laparoscopic assisted hysterectomies and 21 robotic-assisted total laparoscopic hysterectomies.

In FY15 the American Board of Obstetrics and Gynecology approved our application to establish a 3-year gynecologic oncology fellowship at Temple. In FY17 we successfully transitioned our fellowship to accreditation by the American Council on Graduate Medical Education (ACGME). The fellowship program takes advantage of the resources and strengths of Temple University and Temple University Health System that includes Temple University Hospital-Main Campus and Temple's Fox Chase Cancer Center. The fellows (one per year) spend one year doing research and two years on the clinical services. Dr. Christina Chu, who is based at the Fox Chase campus, is the director of the fellowship program. Dr. Karen Houck, who is based at the Temple University Health Sciences campus is the associate director. In addition to the six board-certified gynecologic oncologists on our faculty, the fellowship program is fortunate to have faculty from the departments of pathology, radiation oncology, medical oncology, medical genetics, radiology, surgery, biostatistics and epidemiology. In addition, the fellows have access to research mentors who are members of the Fox Chase Cancer Center research enterprise or from Temple's Fels Institute for Cancer Research and Molecular Biology. The fellows also have access to the vast academic and research resources of Temple University. If they so desire, during their fellowship, they can work toward a Master in Science degree. A Master degree in Urban Bioethics is also offered.

### Research

We continue to actively participate in NIH-funded (GOG/NRG) cooperative clinical trials, industry-sponsored and investigator-initiated clinical trials

## **OVARIAN CANCER**

19-1002/ VB-111-701 MIRASOL: Mirvetuximab Soravtansine vs. Chemotherapy in Gynecological Cancers

(Platinum-resistant disease - PD (per CT) within 90-180 days from completion of a minimum of 4 platinum therapy cycles (calculated from last dose to the day of PD).

## **ENDOMETRIAL CANCER**

RGX-104 in Patients with Advanced Solid Malignancies and Lymphoma w/ Select Malignancies

(Tumor tissue (a min of 10 and up to 15 unstained slides, or paraffin block, ideally from the patient's most recent biopsy), must be available at the patient's local institution prior to the first dose of study therapy).

NRG-GY018, A Phase III Randomized, Placebo-Controlled Study of Pembrolizumab (MK-3475) in addition to Paclitaxel and Carboplatin for Measurable Stage III or IVA, Stage IVB or Recurrent Endometrial Cancer (NCT # 03914612) (09/24/2019). Study on hold by sponsor.

## **CERVICAL CANCER**

None open

*The following articles were published in full or abstract form in FY22 by members of the gynecologic oncology division:*

**Lebental A.** Lymph node dissection for uterine cancer is associated with a higher incidence of venous thromboembolism (abst). *Obstet Gynecol* 2022 (May);139:33S.

**Aioub M, Craig A, Houck K, Hernandez E.** Molecular sequencing patterns for stage I serous endometrial carcinoma tumors with early recurrence versus those without early recurrence (abst). *Gynecol Oncol* 2021 (Jul);162:S207.

Abu-Rustum NR, Yashar CM, Bradley K, Campos SM, Chino J, Chon HS, **Chu C**, Cohn D, Crispens MA, Damast S, Diver E, Fisher CM, Frederick P, Gaffney DK, George S, Giuntoli R, Han E, Howitt B, Huh WK, Lea J, Mariani A, Mutch D, Nekhlyudov L, Podoll M, Remmenga SW, Reynolds RK, Salani R, Sisodia R, Soliman P, Tanner E, Ueda S, Urban R, Wethington SL, Wyse E, Zanotti K, McMillian NR, Motter AD. NCCN Guidelines® Insights: Uterine Neoplasms, Version 3.2021. *J Natl Compr Canc Netw*. 2021 Aug 1;19(8):888-895. <https://doi:10.6004/jnccn.2021.0038> . PMID: 34416706.

Cronin S, Ahmed N, **Craig AD, King S**, Huang M, **Chu CS, Mantia-Smaldone GM.** Non-Gestational Ovarian Choriocarcinoma: A Rare Ovarian Cancer Subtype. *Diagnostics (Basel)*. 2022 Feb 22;12(3):560. <https://doi:10.3390/diagnostics12030560> . PMID: 35328112; PMCID: PMC8947355.

Shulman RM, Weinber DS, Ross EA, Rush K, Rall GF, Olszanski AJ, Helstrom J, Hall MJ, Judd J, Chen DYT, Uzzo RG, Dougherty TP, Williams R, Geynisman DM, Fang CY, Fisher RI, Strother S, **Huelsmann E**, et al. Adverse events reported by cancer patients following administration of a two-dose mRNA COVID-19 Vaccine. *Jnccn* 2022 (Feb);20:160-166. <https://doi.org/10.6004/jnccn.2021.7113>

Sansoni, M, Tagai, EK, Lapitan E, Wen, K-Y, Xu, J., Belfiglio, A, Hudson, SV, Kohler, R, **Hernandez, E, Miller, SM.** Development of a text message-based counseling intervention for follow-up colposcopy among predominately underserved Black and

Hispanic/Latinx women. *Cancer Causes Control* 2022 (Jun);33:861-873.  
<https://doi.org/10.1007/s10552-022-01573-y>

*External presentations in FY22 by members of the gynecologic oncology division:*

**Craig AD, Deng M, Handorf E, Mantia-Smaldone G, Chu C, Ray J, Huelsmann E, Jain A.** Trend in primary treatment of advanced ovarian cancer: a real world national database analysis. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Swiecki-Sikora A, Harris A, Lauder A, Deng M, Tagai E, Jeronis S, Houck K, Miller S, Hernandez E.** Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E, Krais J, Chu C.** Analyses of DNA repair protein expression in BRCA mutant ovarian cancer. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E, Craig A, Ray J, Chu C, Mantia-Smaldone G.** Tumor testing at an NCI designated cancer center: who are we missing? Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann, E, Deng, M, Handorf, E, Chu, C, Mantia-Smaldone, G, Rubin, S, Jain, A** (June 2022). Current Trends in Primary PARP Inhibitor Maintenance in Advanced Epithelial Ovarian Cancer Across the United States (poster). American Society of Clinical Oncology Annual Meeting, June 2022.

**Swiecki-Sikora A, Harris A, Lauder A, Deng M, Tagai E, Jeronis S, Houck K, Miller S, Hernandez E.** Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital (poster). SGO 2022 Annual Meeting on Women's Cancer, Phoenix, AZ, March 18-21, 2022.

**Lebental A, Hernandez E, Houck K, Ackroyd S.** Lymph node dissection for uterine cancer is associated with a higher incidence of venous thromboembolism (poster). 2022 ACOG Annual Clinical and Scientific Meeting, San Diego, CA, May 7, 2022.

**Hernandez E.** The conquest of cervical cancer. 45th class reunion, University of Puerto Rico School of Medicine, San Juan, PR, June 23, 2022.

### Future Goals

- Continue to recruit top candidates for the fellowship program
- Maintain or increase the number of clinical trials that are available at both sites

- Increase the number of presentations at national and regional meetings, as well as the number of publications

## 2. Maternal-Fetal Medicine

### MFM Activities

#### Temple Prenatal Diagnosis Center

Temple University Hospital has a long-standing Prenatal Diagnosis Center that provides comprehensive prenatal diagnosis, and treatment for high-risk pregnancies. The Prenatal Diagnosis Center operates 5 days a week and is staffed by attending perinatologists. It is supplemented by a full-time perinatal nurse and one-part time perinatal nurse, six ultrasonography technicians and support staff. The Prenatal Diagnosis Center provides comprehensive maternal fetal medicine and genetic consultations for high-risk pregnancies within the Temple University Health System and from a number of other referring clinics. We have five state of the art ultrasound machines including a portable machine. These machines are fully capable of providing 3-D imaging as needed and performing advanced Doppler assessments. The Center achieved continued accreditation through the American Institute of Ultrasound in Medicine (AIUM). Temple University Fetal Center is also a clinical training site for Thomas Jefferson ultrasound training program.

During 2021-22, we performed a total of 18,252 procedures in the Fetal Center at TUH, an 8% increase over FY21. This included 2,213 anatomy ultrasound examinations, 1,240 first trimester nuchal translucency ultrasounds, 1,776 transvaginal ultrasounds, 67 fetal echocardiograms, and 19 invasive prenatal diagnosis procedures (Chart 1). The Prenatal Diagnosis Center also provides comprehensive antenatal testing and consultative services around timing of delivery in complicated pregnancies. A total of 5,279 antenatal tests (biophysical profile/non-stress test) were provided over the last year. Six hundred sixty-four umbilical artery Doppler studies were performed to aid in the management of intrauterine growth restriction. Also 89 middle cerebral artery Doppler flow studies were performed to assist in the diagnosis of fetal anemia and twin-twin transfusion syndrome.

#### Perinatal Genetics

Perinatal genetics is an integral part of the Maternal Fetal Medicine division, and is imbedded in our prenatal diagnosis unit. Genetic services were provided by board-certified genetic counselors, Ms. Caroline Bong MS, LCGC and Ms. Gabriella Eisenberg MS, LCGC. Ms. Bong left TUH mid-year and was replaced by Ms. Claire Nelson, MS, LCGC in May 2022. The program provides and disseminates genetic information, coordinates screening for genetic disorders of the mother and fetus, and provides genetic counseling to the obstetric and pre-conception patients as needed. The most frequent genetic problems encountered include advanced maternal age, abnormal maternal serum screening, history of genetic syndromes, and abnormal ultrasound findings. Seven hundred and six patients received genetic counseling at our Center in FY22 (Chart 2).

The slight decrease from previous years is due to the loss of a genetic counselor mid-year.

The perinatal genetics and fetal treatment program includes procedures such as amniocentesis, chorionic villus sampling, multifetal reduction and percutaneous umbilical blood sampling (PUBS). Less of these procedures are being performed nationwide due to the availability of non-invasive prenatal diagnosis. Nineteen invasive prenatal tests including amniocentesis and chorionic villus sampling were performed in FY 22. PUBs and selective reduction and multifetal reduction remain available. In the fiscal year, almost 2,000 patients received non-invasive prenatal diagnosis (NIPT). Few patients opted for sequential screen. Paternity testing is also available in collaboration with the DNA Diagnostic Laboratory

Educational activities include training of medical students, OB/GYN residents and genetic counseling students.

#### MFM Satellite Activities

The MFM division continues to work with the satellite ultrasound sites at the Episcopal and the Northeastern campuses (Chart 4). In FY22, 970 obstetrical ultrasounds were performed at those sites and read by members of the MFM Division. These sites are available for first-trimester ultrasound, first-trimester screening in low-risk patients under the age of 35, low-risk anatomy ultrasound examinations in patients with a BMI <35, and fetal growth evaluations. High-risk ultrasounds and antenatal testing continue to be performed exclusively at Temple University Hospital on Broad Street.

#### MFM Services at Holy Redeemer Hospital

We have contracted to provide Maternal Fetal Medicine services at Holy Redeemer Hospital. Holy Redeemer Hospital directly employs a part-time perinatologist who provides MFM care 3 days a week. Temple Maternal Fetal Medicine physicians provide the additional coverage. Currently we provide physician coverage for outpatient and inpatient ultrasounds, consultations and procedures including amniocentesis and chorionic villous sampling. In FY22, there were 15,851 patient encounters. This number includes 935 outpatient consults and follow-up, 9,200 obstetrical ultrasounds, 9 amniocenteses, 4,931 fetal wellbeing tests and 646 Doppler flow studies. In addition to onsite coverage of the MFM practice four days a week, we provide evening and weekend on call services. We plan to continue to expand those services as the need arises at Holy Redeemer Hospital to include being able to staff the unit with 2 physicians 4 days a week.

#### Obstetric Service

In the 2021-22 Fiscal Year:

- Total Deliveries 2092
- Our primary cesarean is appropriate at 17.4 %
- Our overall cesarean rate has increased to 33.2%.

Chart 4 shows the annual number of deliveries at Temple University Hospital from FY2004 to present. Chart 5 shows the mode of delivery of infants delivered at Temple University Hospital in FY22. Charts 6 through 8 depict the number and types of visits of obstetrical patients seen at our main sites (Residents Clinic at 3<sup>rd</sup> floor Zone C, and Temple Faculty Physicians at Temple University Hospital 7<sup>th</sup> floor Zone B, Roxborough, Episcopal and Northeastern). The total number of new obstetrical patients seen in FY22 at all our sites was 1,960. Chart 9 compares the number of obstetrical visits in FY22 to FY21. Charts 10 and 11 demonstrate the origin of the obstetrical patients delivered at Temple University Hospital in 2021-22. Chart 11 also shows that the proportion of adolescent mothers delivered at TUH has slightly increased at 6.5% in FY22 (it was 6.3% in FY 21 compared to 6.6 % in FY20, 7.6% in FY19, 6.5% in FY18, 7.6% in FY17, 10% in FY16 and 16.9% in FY06).

The Maternal Fetal Medicine division supervises the high-risk patients of the obstetrical service.

### Obstetrics and MFM Education

Medical students- All third-year medical students rotating through Temple University Hospital spend two weeks on the obstetrics service. They are exposed to the maternal fetal medicine service through rotations to the high-risk clinics and inpatient rounds. While on this rotation, they are expected to integrate themselves with the health care teams with assignments in the inpatient and out-patient care areas. The medical students are expected to follow patients, write comprehensive notes, and participate in procedures including deliveries. Their educational experience is through formal and informal didactics from MFM faculty and residents, morning rounds, chapter reviews, journal clubs, and grand rounds. Fourth-year medical students can also choose to spend elective time in an MFM rotation. The fourth year MFM elective includes exposure to prenatal ultrasound examinations, high-risk patients with a variety of medical or obstetrical complications, procedures including deliveries, and didactics. The students upon the completion of their rotation are expected to be familiar with the most common high-risk conditions such as preterm labor, premature rupture of membranes, hypertensive disorders of pregnancy, basic prenatal diagnosis, and principles of management.

Resident education-The residents are required to rotate through the Maternal Fetal Medicine service. A PGY3 and PGY1 resident are assigned to Maternal Fetal Medicine and are responsible for admitting, follow-up, and management of high-risk inpatients under the direction of the MFM specialist covering the service. The residents also see patients in the MFM clinics on Tuesday and Thursdays. Mondays and Fridays, the residents undergo ultrasound training at the Prenatal Diagnosis Center. The PGY1 and PGY3 also observe and/or participates in prenatal diagnosis and treatment procedures. We continue to provide a formal training program for transvaginal ultrasound with an online course and image verification required for certification. By the end of the rotation the PGY3 is expected also to be able to perform a basic fetal anatomic evaluation and an accurate transvaginal ultrasound. The PGY1 is expected to be able to measure fetal biometry, perform a biophysical profile and evaluate amniotic fluid. The Maternal Fetal



Medicine faculty provides formal and informal lectures in the field of high-risk obstetrics and perinatology. Obstetric testing scores increased over the past 3 years for the Ob/Gyn residents.

### Faculty and Research Activities

Each Maternal Fetal Medicine attending has a particular area of research interest. The medical students and residents are encouraged to participate in the many clinical and basic science research activities in the division. The diverse field of interest is illustrated below:

#### Dr. Laura Hart

Dr. Hart is the Medical director of Temple Center of Excellence for Opioid treatment. Dr. Hart continues to conduct research with opioid dependent pregnant women who will participate in a state-funded treatment program. She is an active member of the Health Federation of Philadelphia and the Maternal Mortality Review Committee, and Fetal and Infant Mortality review committee of Philadelphia. In addition, she is the site contact for the Pennsylvania Perinatal Quality Collaborative for both sections of Substance Use Disorder, and Neonatal Abstinence Syndrome. She is currently Co-PI evaluating a personalized platform for management of post-surgical pain with opioids by characterizing opiate use and habit forming behavior in patients undergoing repeat C-section. Dr. Hart is also Co-PI on an NIH-funded study that aims at decreasing opioid misuse and habit-forming behaviors following opioid prescription in patients undergoing Cesarean Section.

She is the site Principal Investigator for the Perinatal Research Consortium (PRC). Temple participates in multiple clinical trials through the PRC.

Dr. Hart's other research efforts can be found in the Research section of this report (Section III).

#### Dr. Wadia Mulla

Dr. Mulla is the Division Director for Maternal Fetal Medicine for Temple Health as well as for Redeemer Health. Dr. Mulla is active in various research collaborations. She remains a Co-Principal Investigator for the all the PRC studies. She is the Temple University site PI for the Medical Optimization of Management of Type 2 Diabetes Complicating Pregnancy (MOMPOD) as well as Fetal Loss/LOSSeq. She was also the PI for Prospective Collection of Whole Blood Specimens from Pregnant Women at Any Risk of Fetal Chromosomal Anomaly for the Development of a Noninvasive Prenatal Test which completed in FY22. She is Co-PI for the PCORI grant: Change of HEART study and the American Essential Hospital Grant –Improving Obstetric Outcomes for Black Maternity Patients. In addition, she is also the Obstetrical site PI for PaTH study: Maternal and Child Health in a Pandemic.

Her research interests are in approaches to decreasing racial bias in obstetrical care, obesity, gestational diabetes and glucose metabolism. In addition, she has taken an active role in collaborative programs among the Philadelphia Birth Hospitals. Her research is further discussed in the research section of this report.

#### Dr. Jack Fitzsimmons

Dr. Fitzsimmons provides research support to the residents. His interested in the use of 17-OH progesterone for the prevention of preterm birth.

#### Dr. Emily Oliver

Dr. Emily Oliver joined the Division of Maternal Fetal Medicine in September 21, 2022. She recently (2021) graduated from MFM Fellowship at Thomas Jefferson University Hospital. She brings her interest and research in the area of stillbirth. She has become the faculty mentor for the resident research committee. She is actively involved in QI and QA resident projects.

#### Faculty Mentorship

The Maternal Fetal Medicine faculty works with the junior faculty in the department to aid in their academic development. The physicians meet with faculty members yearly to review their CV, focus their goals, prepare their case lists and aid them in making academic connections.

#### *The future of Maternal Fetal Medicine at Temple*

The goals of the Maternal Fetal Medicine Division for the next fiscal year are:

- a. Continue participation in the Perinatal Research Consortium and develop a robust research program involving faculty and residents.
- b. Continue to implement evidence-based obstetric and MFM practice protocols in the high- and low-risk obstetric clinics and on labor and delivery.
- c. Continue to participate in systems analysis for patient safety goals for labor and delivery
- d. Continue to increase the volume of obstetric ultrasounds at the Prenatal Diagnosis Center and increase patient satisfaction.
- e. Continue our work as a Center of Excellence in the care of pregnant women with opioid use disorders
- f. Expand MFM consulting services at Holy Redeemer Hospital
- g. Continue to work with the Philadelphia Labor and Delivery Leaders to help to standardize best practices throughout the City of Philadelphia.
- h. Continue participation in Pennsylvania Perinatal Quality Collaborative (PA PQC) to decrease maternal mortality and morbidity with focus on postpartum hemorrhage, hypertensive disorders, maternal opioid use disorders and neonatal abstinence syndrome, and racial disparities in obstetrical care quality bundles.

### 3. Gynecology & General Obstetrics

The Division of Gynecology and General Obstetrics is committed to advancing women's health care using the latest and most advanced technology available. Part of our mission is to include our patients as an integral component of the decision-making process and to eliminate racial and gender disparities when providing care.

#### Faculty

Dr. Arleen Ayala-Crespo is the new director of the Division. The other full time faculty physicians are Drs. Tanise Branche, Bruce Carnivale, Julee Choi, Divya Chillapalli, Kylee Clyatt, Shaliz Dolan, Michelle Duncan, Isabel Eisner, Justin Gamez, Gail Herrine, Stacey Jeronis, Bruce Mabine, and Marisa Rose.

We have fully incorporated our Jeanes Campus faculty with our residents having two block rotations at Jeanes during their third year. Our Jeanes faculty are Drs. Jessie Huff, Samantha So, Debra Somers, and Gail Sullivan.

The department has been lucky to recruit 6 new faculty members that will be starting in the upcoming academic year, five new Ob/Gyn generalists and a new minimally invasive gynecologic surgery-trained (MIGS) faculty. The generalists are Drs. Amy Cruz, Gabriela Algarroba, Janhavi Arun, Zeynep Koc, and Yasmin Korayem. The new MIGS faculty is Dr. Anna Zelivianskaia. Dr. Amy Cruz joins us from Penn State Health Milton S. Hershey Medical Center where she had been an Assistant Professor since 2018 and Vice-Chair for Quality in the Department of Obstetrics and Gynecology. She completed her MD degree at Drexel University College of Medicine in 2012 and her residency at Lankenau Medical Center in 2016. Dr Gabriela Algarroba attended medical school at the University of Pittsburgh School of Medicine and completed her residency at New York University, Long Island School of Medicine. Dr. Janhavi Arun attended Chicago Medical School at Rosalind Franklin University and completed her OB/GYN residency at Henry Ford Health System/Wayne State University. Dr. Zeynep Koc received her medical degree from Marshall University. She completed her OB/Gyn residency at Pennsylvania State Hershey Medical Center. Dr. Yasmin Korayem attended medical school at Cairo University and completed her OB/GYN residency at Michigan State University/Hurley Medical Center. Lastly Dr. Anna Zelivianskaia attended medical school at The University of Illinois-Chicago College of Medicine, she completed her OB/GYN residency at MedStar Washington Hospital Center/Georgetown University where she also went on to complete a fellowship in Minimally Invasive Gynecologic Surgery.

The adjunct faculty in the Division on the active staff of the hospital are: Drs. Anagha Desai, Deslyn Mancini, Faith Pullinger, Nishanth Sidduri, Henry Su, and Clinton Turner. Dr. Laura Igarabuza is an Assistant Professor in Temple's Department of Family and Community Medicine who practices obstetrics. She did her residency at the University of Pennsylvania.

We continue to support our midwifery program. Our Midwives are Melissa Landon, MSN, CNM, WHNP-BC; and Kristen Yoh, MSN, CNM, WHNP-BC. They continue to assist in the Low-Risk Obstetrics Clinic, Faculty Practice, Family Planning Clinic, Labor & Delivery, and in the post-partum unit. We are actively recruiting for at least two more midwives.

Dr Juan Diaz left our department to become the Division Chief of Obstetrics and Gynecology at University of Miami Health System. Dr. Patricia Mattingly left our department to go to Kaiser Permanente in Lithonia, Georgia, where she will be closer to family. Dr. Gloria Diaz has retired. Emma Dorsey, CNM, CRMP, IBCLC has also left our department to join Penn Medicine. Kathleen M. Nishida PhD, CNM, RN moved to St. Mary's Hospital.

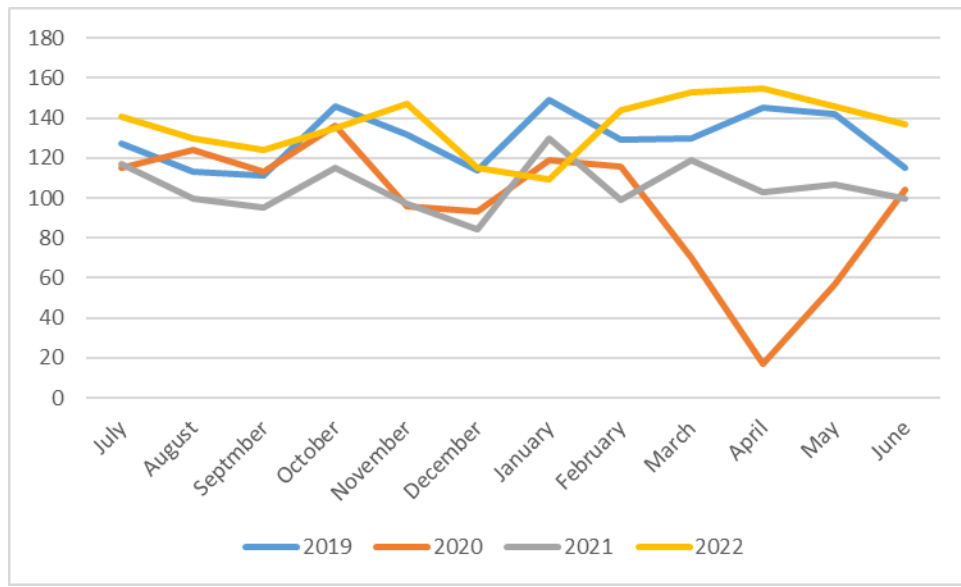
### Clinical

The members of this Division see patients at multiple sites, which include: Family Planning Clinic (8<sup>th</sup> Floor, TUH Out-Patient Building), 7<sup>th</sup> Floor TUH Zone B Faculty Practice, 3<sup>rd</sup> Floor TUH Zone C, Roxborough (Jamestown Medical Office Building), Temple Health at Fort Washington (until June 2022), Episcopal, Northeastern, Bustleton, Elkins Park (Salus University) and Jeanes Campus offices.

In addition, we see patients referred to Temple for inpatient management from clinics located throughout the city such as Greater Philadelphia Health Action, Esperanza Health Center, and Delaware Valley Community Health clinics.

The general gynecological inpatient service team is constituted by an attending physician (service attending), a PGY4, PGY3, PGY2, two interns, the rotating third year medical students, and a fourth year medical student. This team is responsible for managing gynecological emergency cases, performing elective surgery, and caring for these patients post operatively. They also serve as consultants for the emergency room and other inpatient services, both for intraoperative consultation and inpatient management.

Surgical Volume for the Benign Gynecology, Urogynecology, and Gynecologic Oncology Services



In FY22 the entire department performed 1,636 gynecologic surgical procedures at Temple University Hospital-Main and Jeanes Campuses.

Patient Safety

Patient safety is one of the key issues prioritized by the Institute of Medicine as critical for effective health care delivery. Creating a more robust safety program is essential as we build a busier surgical program with more surgeons, with varying levels of experience.

**Minimally Invasive Surgery (MIS):** As a department, we promote the use of minimally invasive technology. As we know, the patients undergoing minimally invasive surgery tend to have a faster recovery and fewer complications than patients having open surgery. The rate of minimally invasive surgery for major procedures has continued to be stable from 77% last year to 78% this academic year. We have continued to hire physicians that are MIGS trained and are adding faculty trained in robotic and laparoscopic techniques.

**Length of Stay:** In FY22 the LOS for patients admitted from the ED was 3.29 days; the budgeted ALOS (average length of stay) was 3.33 for a favorable variance of 0.04. The LOS for elective procedures was 2.87; the budgeted ALOS was 2.43 for an unfavorable variance of -0.44. The combined ALOS (actual) was 3.14 days.

**GYN Clinical Variables:** To keep track of our surgical outcomes we utilize the National Surgical Quality Improvement Program (NSQIP) database for hysterectomies and myomectomies. This is a data-driven, risk-adjusted outcomes-based program to measure and improve the quality of surgical care. Benefits of participating are identifying quality improvement targets, improving patient care and outcomes and decreasing institutional and healthcare costs. There are 691 participating institutions both nationally and internationally.

All the safety indicators were within the expected rate for the NSQIP data for the entire department.

NSQIP patient Safety Quality Indicators. Targeted cases, year 07/01/2020-06/30/2021 for Benign Gynecology, Urogynecology, and Gynecologic Oncology Services

	Total Cases	Observed		Pred Obs Rate	Expected rate	Odds Ratio	95% C.I		Adjusted Quartile
		Events	Rate				Lower	Upper	
Mortality	227	0	0.00%	0.09%	0.10%	0.89	0.22	3.61	2
Morbidity	227	19	8.37%	7.98%	6.80%	1.19	0.78	1.83	3
Cardiac	227	0	0.00%	0.13%	0.15%	0.86	0.23	3.20	2
Pneumonia	227	0	0.00%	0.15%	0.20%	0.77	0.17	3.50	2
Unplanned intubation	227	0	0.00%	0.10%	0.11%	0.87	0.21	3.70	2
Ventilator >48 hr	227	0	0.00%	0.04%	0.05%	0.84	0.08	9.05	2
VTE	227	2	0.88%	0.59%	0.54%	1.09	0.56	2.11	3
UTI	227	9	3.96%	3.26%	2.24%	1.47	0.82	2.66	3
SSI	227	9	3.96%	3.94%	3.90%	1.01	0.58	1.76	2
Sepsis	227	2	0.88%	0.70%	0.64%	1.10	0.49	2.46	3
C. diff colitis	227	0	0.00%	0.05%	0.06%	0.83	0.09	8.06	2
ROR	227	3	1.32%	1.52%	1.58%	0.96	0.58	1.59	2
Readmission	227	9	3.96%	3.84%	3.77%	1.02	0.67	1.54	3

Education

Medical students:

All third-year medical students assigned to Temple University Hospital spend two weeks either in the general gynecology service, gynecologic oncology, urogynecology or at Temple Health Fox Chase Cancer Center. Teaching/work rounds are directed every day

by an assigned attending physician for the week. The students are assigned their own patients to follow. They present and discuss the patients during rounds. They are also able to participate during surgical procedures.

Each third-year medical student rotating through our department pairs up with an attending physician that provides direct mentoring to that student. The students have the opportunity to follow and see patients during that attending's private office hours and receive directed instruction. They also receive additional one on one mentoring. The core division faculty gives at least one formal lecture to the third-year medical students during each block.

*Residents:*

The attendings rotate weekly through the gynecology service and are able to provide close follow-up to patients, direct patient care and guide the residents in the management of our inpatient service. The attendings also lead discussions of the most relevant topics in the field of general gynecology. During these discussions the residents learn the principles of preventive health, family planning, and the medical treatment of gynecologic conditions.

We also have a faculty-supervised pre-operative clinic, where the chief resident on the Gynecology Service evaluates and counsels patients before proceeding with surgical treatment. The residents act as a first- or second- assistant during gynecologic surgeries according to the complexity of the case. Every resident also participates in the daily teaching/work rounds.

As part of their training the second-year residents are responsible for managing and following the "beta book" with the attending of the week. This book keeps track of patients with medically-managed ectopic pregnancies or pregnancies of unknown location. This allows for safe care of these patients.

The residents also participate in the gynecology and family planning clinic where they see a great breadth of pathology and manage anything from regular gynecologic care, family planning services to complex pathologies. They are supervised in this clinic by one of the gynecology attendings that is able to provide guidance, supervision and teaching.

Our residents continue to score above the national average in their In-Service exam in the area of Gynecology and Office Ob/Gyn. This year they scored 3 percentage points above the national average in gynecology, 5 above for office practice and 3 above for questions about surgical procedures.

### Action Plan FY 2023

For this upcoming year we will be integrating the newer faculty so that we can build a more robust gynecology service and increase our outpatient and surgical volume even more than the year past. With the upcoming opening of the Women's campus at Juniata Park we will be able to offer our services to another area of the community and our faculty will be able to expand there. Once the new facility is open our labor and delivery and gynecology services will be transitioned there.

We will also continue to work with the midwifery service to attract new patients that are lower risk and would like to approach labor as a normal process with less intervention.

#### **4. Female Pelvic Medicine and Reconstructive Surgery**

Carol Glowacki, MD, FACOG is the Director of the Section of Female Pelvic Medicine and Reconstructive Surgery (FPMRS), also known as Urogynecology. She joined the Temple faculty in September, 2012. The year 2020 saw the addition of Avita Pahwa, M.D. to the division. Both Dr. Pahwa and Dr. Glowacki specialize and maintain board certification in problems of the female pelvic floor and reconstructive pelvic surgery. These include bladder dysfunction (urinary frequency, urgency and incontinence), pelvic organ prolapse, fecal incontinence, pelvic pain, vulvar pain (vulvodynia or vulvar vestibulitis), painful bladder syndrome (interstitial cystitis), urinary tract infections, hematuria, genito-urinary fistulas, and sexual dysfunction. Following appropriate evaluation and testing, treatment options are discussed and implemented. Treatment options may include medications, physical therapy, pessaries (vaginal support devices) and surgery. Surgical options include abdominal, vaginal, minimally invasive and robotic-assisted approaches, depending on the needs and preferences of the patient. The Section of Female Pelvic Medicine and Reconstructive Pelvic Surgery at Temple often emphasizes a minimally invasive, transvaginal surgical approach to female pelvic floor dysfunction, but also offers abdominal approaches. Dr. Pahwa is expert in robotic approaches to pelvic floor reconstruction, enhancing the offerings of the division to patients. Additionally, sacral neuromodulation, utilizing a technology similar to a pacemaker, is approved for treating patients with overactive bladder, urinary retention or fecal incontinence. Botox injections at different sites in the bladder are used and effective in treating bladder symptoms in patients with neurological disorders, as well as refractory overactive bladder. This year saw the advent of a new periurethral injection technique, Bulkamid. Temple's Division of Urogynecology was among the first to perform this technique in the greater Philadelphia region.

Dr. Glowacki sees patients at Temple University Hospital, Jeanes Hospital, and Center City Philadelphia. Dr. Pahwa sees patients at Temple University, sharing time between the Department of Gynecology and Obstetrics, and the Department of Urology. The clinical and surgical volume was decreased in 2020-21, largely impacted by the COVID pandemic, and gradually rebounded over the course of FY22 academic year. The



addition of Dr. Pahwa has decreased wait times for appointments to approximately 4 weeks for patients who desire to be seen at Temple University Hospital-Main Campus. Dr. Glowacki operates at Temple University Hospital Main and Jeanes campuses. Dr. Pahwa operates at Temple University Hospital-Main Campus with both the departments of Gynecology and Urology. The surgical volume for female pelvic reconstruction has generally rebounded to nearly pre-pandemic volumes, and is anticipated to consistently grow, largely in part to the addition of Dr. Pahwa.

A second year (PGY2) or fourth year (PGY4) gynecology resident is assigned to the FPMRS service and shares time with both Dr. Glowacki and Dr. Pahwa. One day a week, a resident on the ambulatory service rotation works with Dr. Pahwa. The Obstetrics and Gynecology and Urology residents are exposed to the evaluation of the patients with pelvic floor disorders and this frequently includes cystoscopy, urodynamic testing, and other procedures. The residents are exposed to the medical therapy of pelvic floor disorders and to complex pelvic floor reconstruction procedures. The Obstetrics and Gynecology residents and the Urology residents are involved in the FPMRS cases to broaden their exposure to the surgical aspects of the field. Additionally, fourth-year students and third-year medical students rotate on to the FPMRS service for sub-internships and FPMRS clinic, respectively. A few months of the year, a fourth-year medical student on the Women's Health Rotation also spends time in the FPMRS clinic. Both Dr. Glowacki and Dr. Pahwa actively participate in resident and medical student education.

With respect to academic output, we have a few residents looking to pursue careers in FPMRS. Ongoing research projects are focused on surgery for uterine prolapse with cervical elongation and midurethral sling techniques. Additionally, projects related to overactive bladder in the diabetic patient, in conjunction with the Department of Endocrinology are being undertaken.

Looking ahead to FY23, the schedules are being assessed at all clinic sites to maximize patient appointment and resident exposure. A licensed practical nurse continues to perform urodynamic studies and plans to commence posterior tibial nerve stimulation procedures are underway. This will expand treatment options for patients with overactive bladder. The establishment of a separate schedule for urodynamic testing will increase the availability of clinic slots for both follow-up and new patients. As noted, we have seen a gradual increase in medical and surgical cases with the addition of Dr. Pahwa. Regrettably, Dr. Pahwa departed Temple for personal reason in July, 2022. Dr. Joshua Cohn joined the Temple Health system in June, 2022. Dr. Cohn is FPMRS trained urologist. He will be primarily based at the Jeanes/Fox Chase campus, and possibly at Suburban Hospital. Plans for collaborative efforts, particularly at the Jeanes campus are currently underway. The search for a replacement for Dr. Pahwa has commenced.

## 5. Reproductive Endocrinology and Infertility

PGY-4 and PGY-2 residents spend two days each week in the outpatient offices and In Vitro Fertilization center of Drs. Castelbaum and Freedman, Co-Directors of The Division of Reproductive Endocrinology and Infertility. Residents gain proficiency in performing vaginal ultrasonography for the evaluation of ovarian follicles, endometrial thickness, and uterine anomalies. Residents also perform many first trimester pregnancy ultrasounds. They evaluate and treat pregnancies of unknown location and ectopic pregnancies.

PGY-4 and PGY-2 residents participate in the initial evaluation of infertile couples. The resident integrates history, physical findings, ultrasonographic images and laboratory data in formulating a differential diagnosis and establishing an evidenced-based treatment plan.

PGY-4 and PGY-2 residents are exposed to evidence-based ovulation induction protocols including clomiphene citrate, aromatase inhibitors, gonadotropins, gonadotropin agonists, gonadotropin antagonists, luteal phase estradiol priming and minimal stimulation. They become proficient in interpreting ultrasound and hormonal data in order to maximize pregnancy rates while minimizing the risks of high order multiple gestations and ovarian hyperstimulation syndrome.

Residents have a comprehensive exposure to In Vitro Fertilization (IVF). They are actively involved in the evaluation of patients undergoing IVF and embryo transfer. They gain experience in pre-IVF assessment including ovarian reserve testing, uterine evaluation and semen analysis interpretation. Residents also are exposed to IVF ovulation induction regimens tailored to patient's unique infertility issues. Residents attend oocyte retrievals and embryo transfers. They also observe IVF laboratory procedures including ICSI (intracytoplasmic sperm injection), embryo biopsy, laser assisted hatching, embryo/oocyte cryopreservation and embryo/oocyte thawing. Residents participate in outpatient diagnostic hysteroscopies and practice embryo transfers. They are exposed to thoughtful evidenced-based patient counseling to minimize the number of embryos transferred and lower the risk of multiple gestations. More than 65% of IVF patients elect to have their embryos biopsied at the blastocyst stage for Pre-Implantation Genetic Screening for Aneuploidy (PGT-A). Transfer of a single PGT-A embryo has resulted in implantation rates of 70% with delivery rates greater than 50%. Virtually all embryo transfers are single embryo. Trainees also gain experience in interpreting pre-implantation genetic results.

At the conclusion of their rotation, it is expected that PGY-4 and PGY-2 Resident will be capable of managing all aspects of the initial work-up of infertile patients. They should also be proficient in managing ovulation induction with oral medication, and gain experience in performing transvaginal ultrasonography.

Drs. Castelbaum and Freedman give a total of eight Grand Round lectures annually for the Department of Obstetrics, Gynecology and Reproductive Sciences. Drs. Castelbaum

and Freedman also lecture third year medical students during their Obstetrics and Gynecology rotation. Fourth-year medical students can take advantage of a 4-week elective in Reproductive Endocrinology and Infertility (REI) with Drs. Castelbaum and Freedman. Four to seven senior medical students rotate annually. Their experience mirrors that of the 3<sup>rd</sup> and 4<sup>th</sup> year Residents. The students taking this elective are required to present one formal talk on a REI topic. Multiple first-year medical students also shadow Drs. Castelbaum and Freedman for an initial exposure to evidenced-based infertility treatment.

Dr. Castelbaum was part of a research team investigating the impact of embryo biopsy for Pre-implantation Genetic Testing for Aneuploidy (PGT-A). The work demonstrated for the first time that genetically abnormal embryos have almost no possibility of developing into normal children, strengthening the validation for this important IVF innovation.

(Tiegs AW, et al. A multicenter, prospective, blinded, nonselection study evaluating the predictive value of an aneuploid diagnosis using a targeted next-generation sequencing–based preimplantation genetic testing for aneuploidy assay and impact of biopsy. Fertil Steril 115: 627-637, 2021)

## **6. Administration**

### Revenue/Expenses:

The faculty productivity through June 2022 was at the 66 percentile of the MGMA benchmark, adjusted for clinical FTEs. The Department’s revenue and expense through June was very favorable, with a 44% positive variance to budget. However, we felt the impact of multiple extended leaves of absence and 3 vacant faculty/APP positions, ending the year with negative variances to budget in charges (-10%), payments (-15%) and visits (-20%). We ended the year with favorable variances over actual FY21 for charges (2%), payments (flat), RVUs (6%) and visits (6%).

### Staffing:

26	Clerical/secretarial staff
42	Clinical staff
10	Advanced Practice Providers
11	Administrative staff
1	Research staff
2	Genetic Counselors
1	Social Worker
<u>1</u>	<u>Academic Education administrator</u>
94	Total staff

It was a challenging year recruiting to fill many vacancies. We continue to recruit and have been fortunate in the skilled candidates applying.

Accomplishments:

- In conjunction with a program spearheaded by the Philadelphia Department of Health we contracted with Community Behavioral Health (the behavioral health insurer for medical assistance patients in Philadelphia County) to embed staff in our offices to improve access into care.
- IT update: Prepared for major EPIC upgrade scheduled for October 1, 2022 changing from GE Centricity to EPIC for Registration, scheduling and billing activities across the health system by all entities.
- Integrated three Temple Physician, Inc. GYN offices to our department in Temple Faculty Physicians. This includes the expansion of OB, GYN and GYN surgeries at the Temple University Hospital Jeanes Campus. Recruited two new faculty members to join and support The Jeanes Campus Ob/Gyn section of 5 FTE faculty.
- Continued our social media campaign with marketing department support, targeting women in the communities surrounding the offices on the Episcopal and Northeastern campuses.
- Continued to expand our Gender Affirming services collaborating with a multidisciplinary team.
- Expanded our Midwifery Service to allow for day coverage in Labor & Delivery, Postpartum (maternity) unit, and additional outpatient practice opportunities.
- Collaborated with teams across Temple Health on the planning for obstetrical and gynecologic hospital and outpatient services in the Juniata Park section of Philadelphia. Temple Health purchased the Cancer Treatment Centers of America hospital campus at that location where Temple Health is planning to establish a Women's Hospital.

## **VII. SERVICE**

The Department of Obstetrics, Gynecology and Reproductive Sciences is involved in a variety of community service activities. A few of these activities are described below:

## A. COMMUNITY OUTREACH EVENTS

1. Temple Health held a community event for Women's Health at the future site of the new hospital for women's health services. April 1, 2022
2. Our hospital team participated in the annual Delaware Valley NOCC (National Ovarian Cancer Coalition) event, Parade of Hope on Fox Chase Cancer Center Campus. September 12, 2021
3. In the News:
  - July 4, 2021, WHYY: Drs. Stacey Jeronis and Christina Chu – Physician Wellness in Light of the Ongoing Coronavirus Pandemic.
  - August 16, 2021, 6ABC-TV: Dr. Patricia Mattingly – Obesity and Infertility.
  - August 25, 2021, The Philadelphia Inquirer: Dr. Sharon Herring -- \$5.99 Million in PCORI research funding for study on black maternal heart health.
  - September 13, 2021, 6ABC-TV: Dr. Christina Chu –What is Fertility Sparing? How it gives ovarian cancer patients a chance at motherhood.
  - October 28, 2021, HemOnc Today: Dr. Christina Chu –Many women who never received HPV vaccine also not up-to-date on cervical cancer screening.
  - December 1, 2021, Al Dia News: Highlights Temple Health's plan to open hospital for women's health services.
  - February 15, 2022, 6ABC-TV: Drs. Isabel Eisner and Tanise Branche — Discussion with patient about endometriosis.
  - February 23, 2022, NPR: Dr. Sharon Herring – Highlighted PCORI research funding for study on black maternal heart health.
  - March 10, 2022, Northeast Times: Dr. Suzanne Miller – Prevent Cancer Foundation supports project designed to test whether text messaging can reduce urban cervical cancer disparities.
  - April 14, 2022, The Philadelphia Inquirer/Tribune/6ABC-TV: Highlight announcement of new funding for maternal and child health at new hospital for women's health.
  - May 10, 2022, HemOnc Today: Dr. Christina Chu – Uterine cancer mortality increases significantly, racial disparities appear multifactorial.

May 23, 2022, 6ABC-TV: Drs. Carol Glowacki and Avita Pahwa: Moves in Medicine – Stress Incontinence.

June 20, 2022, 6ABC-TV: Drs. Carol Glowacki and Avita Pahwa: Moves in Medicine – Pelvic organ prolapse.

## **B. FAMILY PLANNING**

1. Family Planning Services Grant through Access Matters – In FY2022, Temple GYN/Family Planning Clinic had a total of 8,050 visits. Of this, 68% (5450) were family planning visits. The majority of our family planning patients served were between 20-29 years of age (51%), and at or below 100% of the federal poverty line. These statistics support the need for our Title X program, to allow patients access to quality, comprehensive reproductive health care, regardless of economic status.
2. The Breast and Cervical Cancer Prevention and Treatment (BCCPT) is a breast and cervical cancer early detection program that provides free clinical breast examinations, mammograms, pelvic exams, Pap Smears, education, and follow-up diagnostic care for abnormal results for uninsured and underinsured women 21-64 years of age. The BCCPT program was introduced in 2002 as a funding source for women whose cancer screenings showed breast or cervical cancer or pre-cancerous conditions. The BCCPT program expedites a fast track Medical Assistance application approval, providing the patient full coverage for all treatment within five days of the application date. The BCCPT program also supports other departments in the Temple Health System, including Diagnostic Imaging, Surgery, and Colposcopy Clinic. Our department has been a recipient of this funding for over 20 years. In FY2022, Temple GYN/Family Planning Clinic enrolled up to 60 patients under the BCCPT program.
3. Routine HIV Screening and Quick Start Method for Contraception. We provide opt-out annual HIV screenings to all GYN/family planning patients, per the requirements of the Title X program. Additionally, we continue to make available rapid HIV screenings to family planning patients via the 60-second INSTI® test, along with the following services: linkage to care and treatment for HIV positive clients, and for at-risk clients, counseling and referrals for PrEP (pre-exposure prophylaxis), condom distribution, and annual sexually transmitted infections (STI) screening and treatment.

Since 2014, we implemented the “Quick Start Method” for contraception services. The term “quick start” means starting hormonal contraception at the time a woman requests contraception rather than waiting for her next menstrual cycle, as long as a provider is reasonably certain that the woman is not currently pregnant or at risk for pregnancy. Starting contraception immediately, rather than waiting for the next menses, may theoretically reduce the time a woman is at risk for pregnancy; prevent her forgetting information on correct use of the method; prevent waning enthusiasm for the method and use of a less reliable alternative method; and reduce client costs and barriers to returning for contraception (e.g. transportation, time, childcare). Therefore, the quick start method might be expected to reduce unintended pregnancy rates by improving initiation and continuation of contraceptives compared to conventional start methods. Several studies have addressed this hypothesis.

In FY22 6.5% of patients who had their babies at TUH were adolescents.

Satellites operating under the Family Planning umbrella. Student Health Services (operated by Student Health), provides family planning services, STI testing and treatment, PrEP, and gynecologic examinations to Temple University students. There were 3643 family planning visits in FY22.

### C. **FACULTY INTRA- AND EXTRA-INSTITUTIONAL SERVICE**

The faculty participate on a number of intra- and extra-institutional committees. These include:

Dr. Ayala

- Director L&D laboratory
- Director Ob/Gyn Clinical Simulation
- Director, Family Planning Clinic
- Faculty advisor, medical students Ob/Gyn interest group
- Ob/Gyn Department Education Committee
- Ob/Gyn Residency Clinical Competency Committee

Dr. Branche

- Ob/Gyn Department Education Committee
- OB/Gyn Residency Clinical Competency Committee
- Graduate Medical Education Committee
- Faculty Advisor for Medical Students Ob/Gyn Interest Group
- Teaching Faculty Internal Medicine Residency Ambulatory Subspecialty Experience in Ob/Gyn

Dr. Chillapalli

Transfusion Committee  
LKSOM Admissions Committee  
Director FLS for Ob/Gyn

Dr. Dolan  
OB/Gyn Residency Clinical Competency Committee  
Ob/Gyn Department Education Committee

Dr. Duncan  
Ob/Gyn Department Education Committee  
Director, Ob Triage

Dr. Eisner  
OR Executive Committee  
Robotic Surgery Steering Committee

Dr. Glowacki  
OB/Gyn Residency Clinical Competency Committee  
“GIN” Rounds  
Ob/Gyn Department Education Committee  
Philanthropy Committee  
Advisor to Medical Students for Choice

Dr. Hart  
Residency Clinical Competency Committee  
LGBTQ Alliance Task Force  
Centers of Excellence Obstetrics Education Committee (City-Wide)  
Temple University Substance Abuse Task Force  
Ob/Gyn Research Committee  
OD Stat: Philadelphia Department of Public Health Opioid Overdose  
Fatality Review Committee  
Philadelphia Fetal and Infant Mortality Review (FIMR) Committee  
Philadelphia Maternal Morbidity and Mortality Review Committee  
Pennsylvania Perinatal Collaborative

Dr. Herrine  
TUH Perinatal Core Measures (Chair)  
TUH Baby Friendly Steering Committee (Chair)  
TUH Breastfeeding Task Force  
TUH PI/Patient Safety  
TUH OB Relationship Building  
TUH OB PI Committee (co-chair)  
TUH Baby Friendly Policy Committee (Chair)  
School of Medicine LGBTQ Alliance Task Force  
Ob/Gyn Research Committee



Ob/Gyn Department Education Committee  
Philadelphia Multihospital Task Force  
American College of Obstetricians and Gynecologists (ACOG)'s  
Breastfeeding Expert Workgroup  
ACOG's Representative to the United States Breastfeeding Committee  
Board of Directors, Academy of Breast Feeding Medicine

Dr. Houck

OB/Gyn Residency Clinical Competency Committee  
Gynecologic Oncology Fellowship Clinical Competency Committee  
Cancer Committee  
Robotic Surgery Committee  
Associate Director Gyn Oncology Fellowship

Dr. Jeronis

Claims Committee  
Peer Review Committee  
Medical School Admissions Committee  
Practitioner Wellness Committee (Chair)  
Temple AOA Chapter Student Selection Committee  
Department Appointments and Promotions (Chair)  
Ob/Gyn Research Committee  
Ob/Gyn Department Education Committee

Dr. Mulla

Vice Chair, Medical Staff Credentials Committee  
Performance Improvement Committee  
Ob/Gyn Department Education Committee  
Ob/GYN Research Committee  
Philadelphia Maternal Mortality Review  
Pennsylvania Perinatal Collaborative  
Philadelphia Labor and Delivery Leaders Committee  
Pennsylvania Resource Council

Dr. Rose

IRB  
Student Learning Environment and Appeals Committee  
Interviewer for Admissions Committee  
Endocrine/Reproductive Organ Systems Review Committee  
Clerkship Directors Committee  
Temple Health Provider Reputation Committee  
OB/Gyn Residency Clinical Competency Committee  
Residency Wellness Committee  
Departmental Appointments and Promotions Committee  
Curriculum Committee (Chair)  
Graduate Medical Education Committee

Physicians Assistants Program  
Ob/Gyn Department Education Committee  
Medical Faculty Senate, Buildings and Facilities Committee

Dr. Hernandez

Women and Infants Patient Experience Committee  
Women's Hospital Leadership Group  
Women's Hospital Clinical Advisory Committee  
Diversity Council  
Curriculum Committee  
Tenure Committee  
American College of Surgeons  
    Anti-Racism Committee of the Regents  
American Cancer Society, Philadelphia Area  
    Board Member  
    Mission Committee  
Philadelphia County Medical Society  
    Board Member, Phfaler Foundation  
    Nominations Committee  
College of Physicians of Philadelphia  
    Board of Directors member  
    Admission to Fellowship Committee  
Pennsylvania medical Society  
    House of Delegates

## **VIII. PUBLICATIONS AND PRESENTATIONS (FY22)**

### **A. PUBLICATIONS**

Publications July 1, 2021 to June 30, 2022

Gude J, **Anasti J**, Durgham RA. Characteristics that influence the success of external cephalic version in nulliparous women (abst). *Obstet Gynecol* 2022 (May);139:57S.  
doi:10.1097/01.AOG.0000826068.97270.1a

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doi:10.1097/01.AOG.0000826768.03992.e1

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B. PRESENTATIONS (Extramural)

Presentations July 1 2021 to June 30, 2022

Lobitz G, **Rose M**. A peer-to-peer online learning module for fetal heart tracings to complement clerkship learning. 2022 APGP Martin L. Stone MD, Faculty Development Seminar, Amelia Island, FL, Jan 8-11, 2022.

**Aioub M, Gee T, Mutter O, Harmon K, Abdo A, Prescott S, Zhao H, Diaz J, Ayala-Crespo A**. Development and implementation of a robotic surgery training curriculum (poster). American Association of Gynecological Laparoscopists (AAGL) Global Congress. Austin, TX, Nov 2021.

**Craig AD, Deng M, Handorf E, Mantia-Smaldone G, Chu C, Ray J, Huelsmann E, Jain A**. Trend in primary treatment of advanced ovarian cancer: a real world national database analysis. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Swiecki-Sikora A, Harris A, Lauder A, Deng M, Tagai E, Jeronis S, Houck K, Miller S, Hernandez E**. Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E, Kraus J, Chu C**. Analyses of DNA repair protein expression in BRCA mutant ovarian cancer. Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann E, Craig A, Ray J, Chu C, Mantia-Smaldone G**. Tumor testing at an NCI designated cancer center: who are we missing? Mid-Atlantic Gynecologic Oncology Society Annual Meeting (virtual), October 22, 2021.

**Huelsmann, E, Deng, M, Handorf, E, Chu, C, Mantia-Smaldone, G, Rubin, S, Jain, A** (June 2022). Current Trends in Primary PARP Inhibitor Maintenance in Advanced Epithelial Ovarian Cancer Across the United States (poster). American Society of Clinical Oncology Annual Meeting, June 2022.

**Swiecki-Sikora A, Harris A, Lauder A, Deng M, Tagai E, Jeronis S, Houck K, Miller S, Hernandez E**. Attitudes and beliefs about the human papillomavirus vaccine amongst patients with and without cervical dysplasia in a large urban academic hospital (poster). SGO 2022 Annual Meeting on Women's Cancer, Phoenix, AZ, March 18-21, 2022.

**Lebental A, Hernandez E, Houck K, Ackroyd S**. Lymph node dissection for uterine cancer is associated with a higher incidence of venous thromboembolism (poster). 2022 ACOG Annual Clinical and Scientific Meeting, San Diego, CA, May 7, 2022.

**Hernandez E.** The conquest of cervical cancer. 45th class reunion, University of Puerto Rico School of Medicine, San Juan, PR, June 23, 2022.

Ostiller K, Smith R, **Rose M.** Development and Implementation of Obstetrics Simulation to Enhance Student Engagement in Learning in the Third Year OBGYN Clerkship (poster). CREOG & APGO Annual Meeting; March 9-12, 2022; Orlando, FL.

**Rose, MZ.** Implementation of an online discussion board to teach and evaluate the LCME curricular content elements (poster). CREOG & APGO Annual Meeting; March 9-12, 2022; Orlando, FL.

**Liu, A,** Chen, S, **Herrine, G,** **Washio, Y.** Prenatal hand expression of breastmilk to help increase initial and exclusive breastfeeding rates (poster). Academy of Breastfeeding Medicine Annual Conference, Schaumburg, IL, October 2021.

**Oliver EA,** Waterman E, Kuncio A, Addish E, Tholey D, Fenkel J, Schuster M. Maternal viral load and risk of vertical transmission in patients with Hepatitis C. S419. *Society for Maternal-Fetal Medicine, February 2022, Virtual Meeting.*

Schuster M, **Oliver EA,** Kuncio D, Waterman E, Addish E., Tholey D, Fenkel J. Vertical Transmission of Hepatitis C Stratified by Maternal Viral Load. *AASLD, October 2021, Virtual Meeting.*

**Hart L.** Care & Treatment of Families Impacted by OUD. CME conference sponsored by Philadelphia Department of Public Health and the Health Federation of Philadelphia. November 2021.

**Hart L.** Care & Treatment of Families Impacted by OUD. CME conference sponsored by Philadelphia Department of Public Health and the Health Federation of Philadelphia. March 2022.

## IX. CONTACT INFORMATION

### Chairman's Office

(215) 707-3002

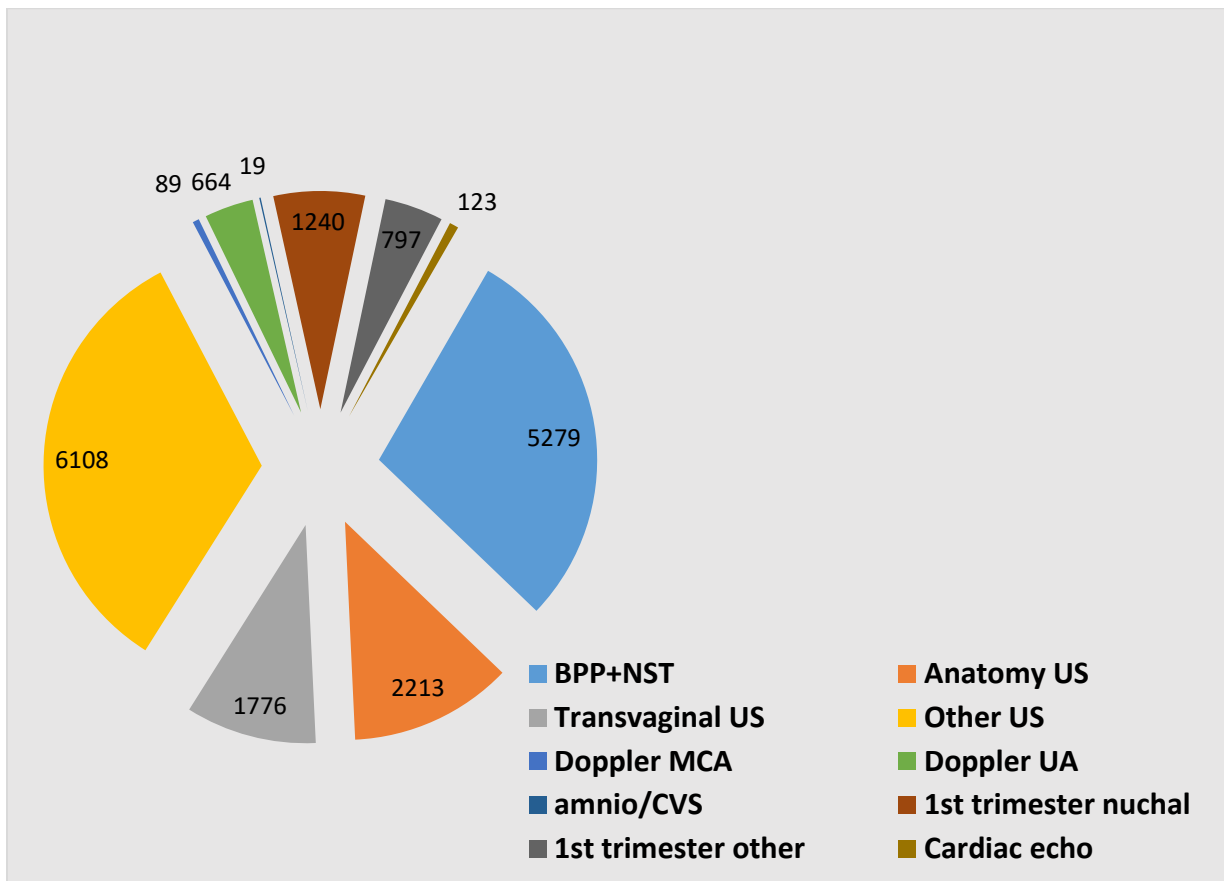
### Practice Locations:

<b>Faculty OB/GYN Practice</b> Temple University Hospital 7 <sup>th</sup> Floor, Zone B 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3008	<b>Temple General OB/GYN Practice</b> <b>Satellite Locations:</b>	<b>Gynecologic Oncology</b> <u>Temple University Hospital</u> 7 <sup>th</sup> Floor, Zone B 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3015
<b>GYN/Family Planning Clinic</b> Temple University Hospital 8 <sup>th</sup> Floor, Zone B 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3232	<u>Episcopal Campus</u> 100 E. Lehigh Avenue, CHC 2 Philadelphia, PA 19125 Appointments: (215) 707-1840	<u>Chestnut Hill Hospital</u> 8815 Germantown Ave., Ste. 46 Philadelphia, PA 19118 Appointments: (215) 707-3015
<b>OB/High-Risk OB Clinics</b> Temple University Hospital 3 <sup>rd</sup> Floor, Zone C 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3008	<u>Jeanes Campus</u> 7500 Central Avenue Physician Office Bldg., Suite 210 Philadelphia, PA 19111 Appointments: (215)707-3008	<u>Holy Redeemer Hospital</u> Holy Redeemer Medical Office Bldg. 1650 Huntingdon Pike, Suite 118 Meadowbrook, PA 19046 Appointments: (215) 707-3015
<b>Maternal-Fetal Medicine Consultation</b> Temple University Hospital 3 <sup>rd</sup> Floor, Zone C 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3008	<u>Northeast</u> 9931 Old Bustleton Ave. Suite 203 Philadelphia, PA 19115 Appointments: (215) 602-8900	<u>Temple Cancer Center</u> 3401 N. Broad Street 4 <sup>th</sup> Floor, Zone D Philadelphia, PA 19140 Appointments: (215) 707-3015
<b>Fetal Center</b> Temple University Hospital 8 <sup>th</sup> Floor, Zone B 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3648	<u>Northeastern Campus</u> 2301 E. Allegheny Ave. Ste. 180 Philadelphia, PA 19134 Appointments: (215) 926-3700	<u>Colposcopy Clinic</u> Temple University Hospital 3 <sup>rd</sup> Floor, Zone C 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3008
<b>Urogynecology</b> <u>Temple University Hospital</u> 7 <sup>th</sup> Floor, Zone B 3401 N Broad St Philadelphia, PA 19140 Appointments: (215) 707-3008	<u>Roxborough</u> Jamestown Medical Building Suite 107 525 Jamestown Avenue Philadelphia, PA 19128 Appointments: (215) 483-7700	<b>Reproductive Endocrinology and Infertility</b>  <b>Reproductive Medicine Associates of Philadelphia (RMA of Philadelphia)</b> Appointments: 215-938-1515
<u>Temple Health – Jeanes Campus</u> 7500 Central Avenue Physician Office Bldg., Suite 210 Philadelphia, PA 19111 Appointments: (215) 707-3008		
<u>Center City Office</u> Medical Arts Tower 255 S. 17 <sup>th</sup> Street 21 <sup>st</sup> Floor, Suite 2101 Philadelphia, PA 19103 Appointments: (215) 707-3008		

## X. Illustrations and Charts

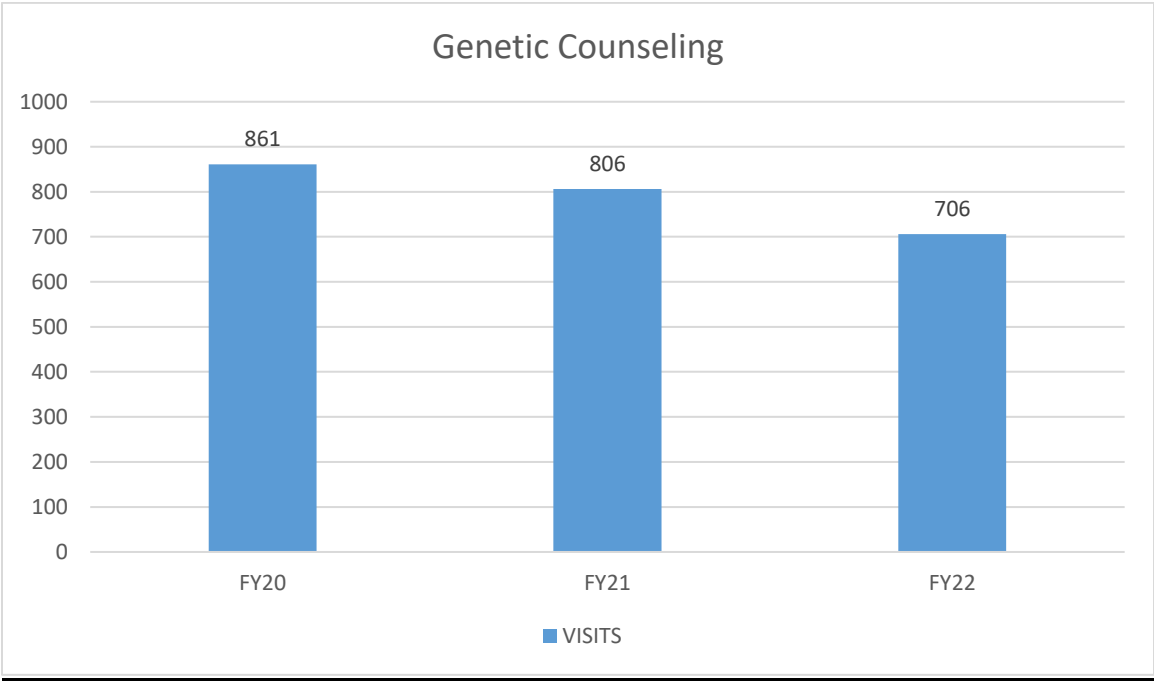
**Chart 1. Procedures performed at Temple’s Prenatal Diagnosis Center in FY22**

**TOTAL = 18,252 (16,718 in FY21)**

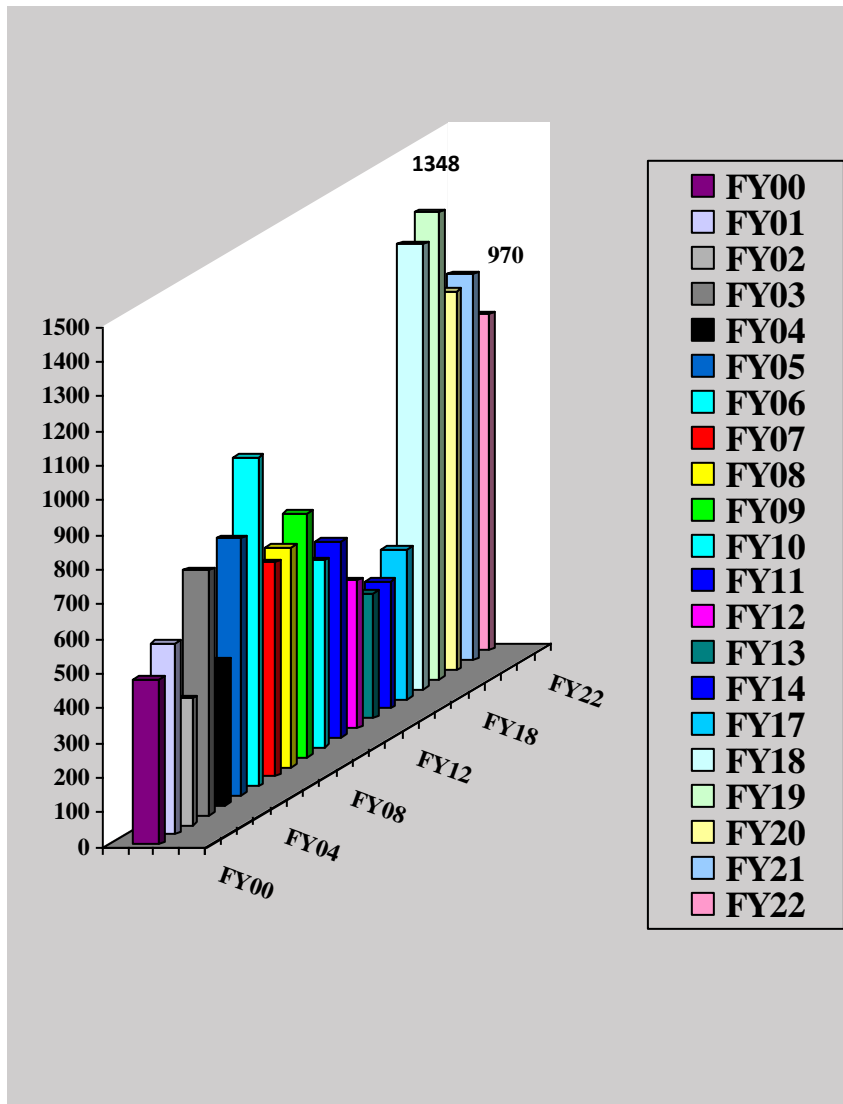




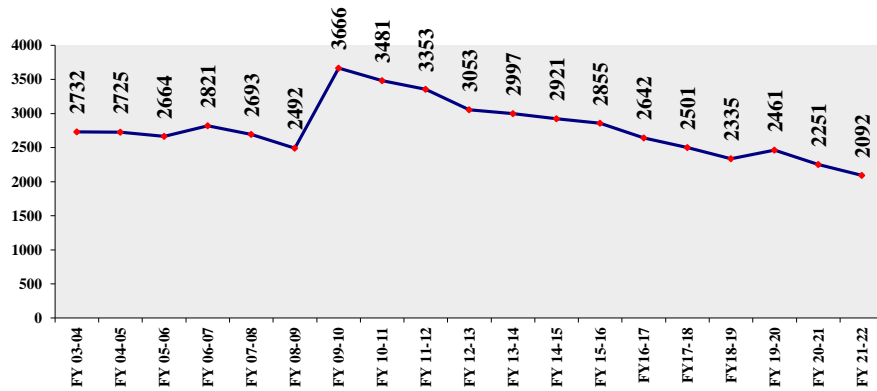
**Chart 2. Genetic counseling visits at Temple University Hospital**  
*(only 1 genetic counselor for one-half of FY22)*



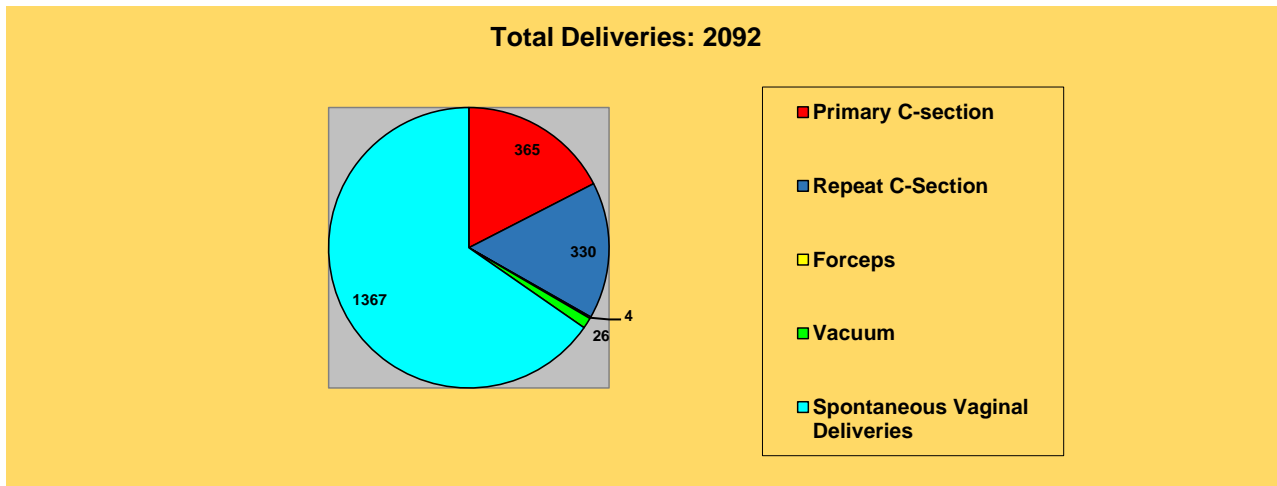
**Chart 3. Satellite MFM Activities (ceased in 2014). Obstetrical ultrasound services reactivated on November 1, 2016 at Northeastern and Episcopal Campuses.**



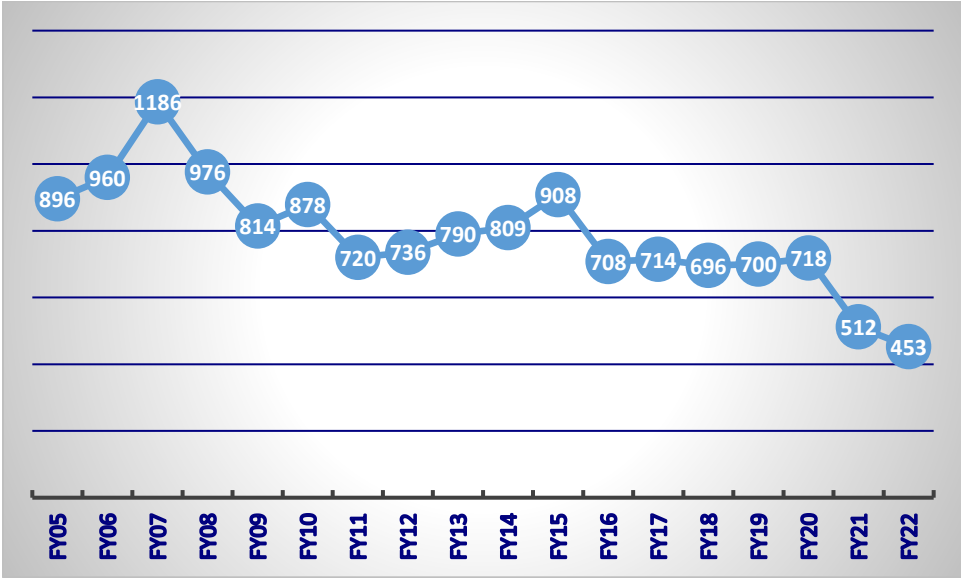
**Chart 4. Obstetrical Deliveries at Temple University Hospital**



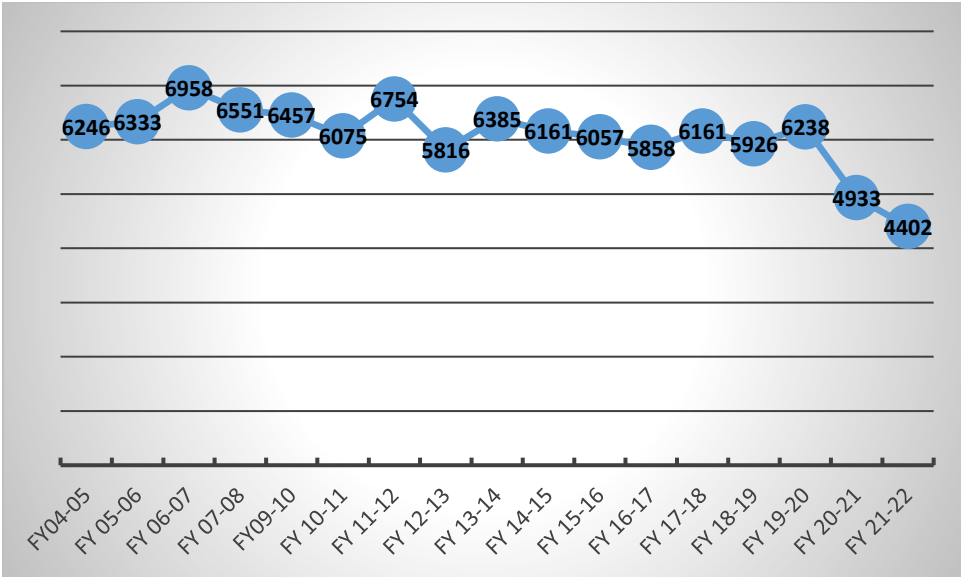
**Chart 5. Mode of Delivery at Temple University Hospital FY22 (33% C-section)**



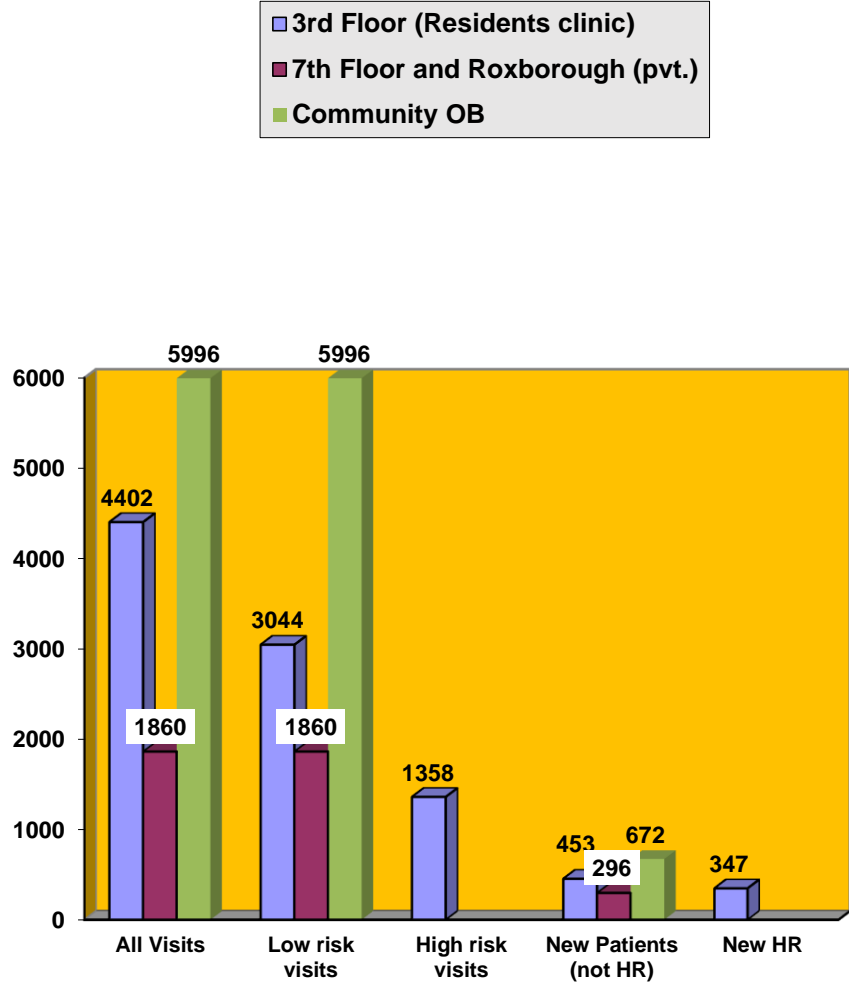
**Chart 6. New Obstetrical patients (low-risk) seen at the Residents Clinic**



**Chart 7. Total obstetrical visits at the Residents Clinic**



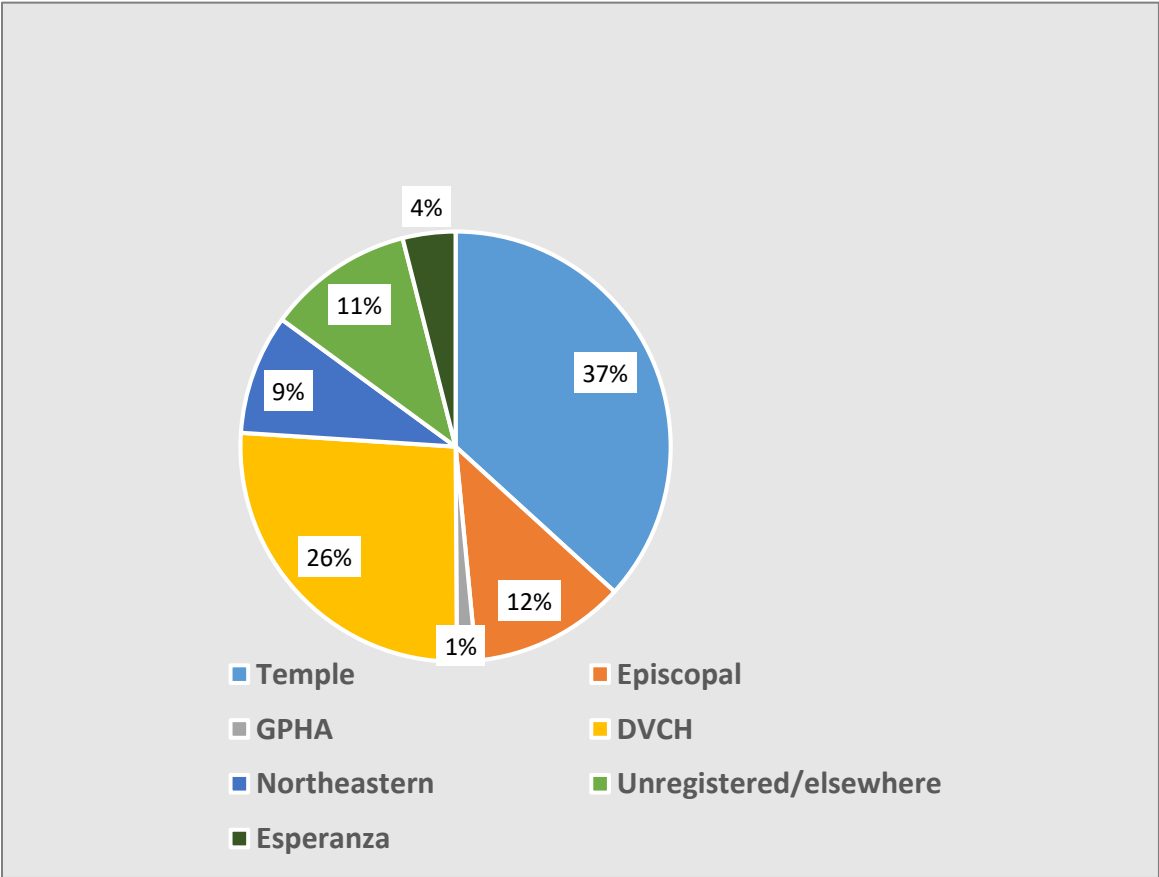
**Chart 8. Outpatient obstetrics: High-Risk (HR), and low-risk obstetrical visits at Temple Faculty Physician Practices FY22**



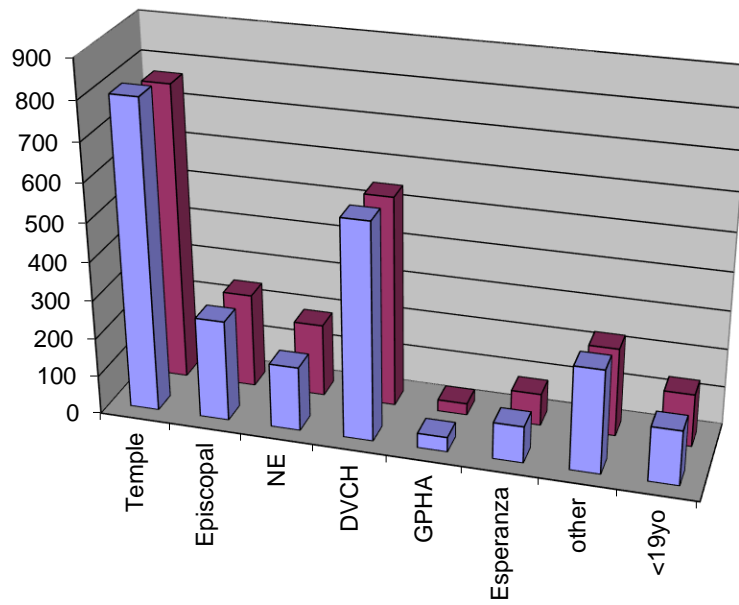
**Chart 9. Obstetrical visits at all sites FY22 vs FY21**



**Chart 10. Deliveries at Temple University Hospital by referral source FY22**



**Chart 11. Site of prenatal care of patients delivered at Temple University Hospital and number of teenage mothers.**



	Temple	Episcopal	NE	DVCH	GPHA	Esperanza	other	<19yo
■ 2021	802	262	167	564	38	95	269	142
■ 2022	770	245	189	547	30	83	230	137

\*Proportion of adolescents delivering at TUH was 6.5% in FY22 compared to 10% in FY16 and 16.9% in FY06.



