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Ernst W. Bertner Chairman and Professor
FB McGuyer Family Endowed Chair in Fetal Surgery
Department of Obstetrics and Gynecology
Professor, Department of Anesthesiology
Professor, Department of Surgery
Baylor College of Medicine
Obstetrician-in-Chief
Texas Children’s Hospital
WELCOME TO THE 2017 CHAIR’S REPORT OF THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY AT BAYLOR COLLEGE OF MEDICINE.

In the pages that follow, you’ll find the story of another remarkable year for this department, thanks to a dedicated team of professionals. The numbers inside speak volumes about what they have achieved. The articles offer a glimpse of the extraordinary people and programs behind that progress.

In 2017, we improved the lives of women and children the world over through a collective focus on three critical healthcare themes: quality and safety, improved access to care, and collaboration. These are the drivers behind everything we do, everywhere we practice, and every advancement we make in maternal and fetal care. Every day, we advocate for continuous improvement on behalf of our patients, their families, and our shared future together.
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Backed by Baylor College of Medicine’s renowned research infrastructure, we are continually enhancing the world’s understanding of women’s health, translating new knowledge into new treatments that save and transform lives.
Dr. Russell Deter has collaborated with leading minds in science and medicine, contributed to Nobel Prize-winning work, and developed techniques used the world over to monitor fetal growth and detect growth abnormalities.

In 2017, this Baylor faculty member of 50 years continued to build on his lifelong contributions, advancing modern medicine through advanced mathematics. “Mathematics has the power to give you information you can’t get any other way – information that can benefit the mothers and fetuses we care for,” he says.

“By the time I finished medical school, I had already decided I was more interested in cell biology than clinical medicine,” says Dr. Deter. He headed to Rockefeller University for a postdoctoral fellowship in the lab of Belgian scientist Dr. Christian de Duve, one of the founders of cell biology.

“He had a superior program, very strong in mathematics,” says Dr. Deter. “Little did I know he also had the best system known to man for scientific training, converting me into the scientist I wanted to be.” He spent the next three years studying autophagy, the recycling of a cell’s own components, writing the first papers on the topic from the de Duve lab. In 1974, Dr. de Duve won the Nobel Prize for the discovery of the lysosome.

“Trained by the best, I was welcomed with open arms when I returned to Baylor,” he says, continuing his autophagy work until the field and funding went dormant. Decades later, new discoveries led to the first-ever Nobel Prize for autophagy in 2016. “I couldn’t believe that the little-known science I contributed to 50 years earlier had become an international field of study with its own Journal, recognized for the fundamental role it plays in cell biology,” says Dr. Deter.

History would repeat itself as he migrated to embryology and soon found himself in another field ahead of its time. “I was asked to develop an obstetrical ultrasound program for a new
prenatal diagnostic center at Baylor, which aligned with my experience interpreting 2-dimensional images," he says. “I became only the second person in Houston at that time to do obstetrical ultrasound exams.”

It was the start of a 40-year career in the field and a highly fruitful research collaboration with Dr. Frank Hadlock, providing obstetricians the clinical data they were eager for, including fetal weight and age estimation procedures still in use today.

Another productive collaboration followed with Dr. Ivar Rossavik, advancing the field of individualized growth assessment. “Rossavik’s fetal size model uses mathematics to predict the future,” says Dr. Deter, “creating an individualized, projected third trimester growth curve for each fetus to help detect growth abnormalities.”

At age 65, he continued building on that work through a long-term collaboration with Dr. Wesley Lee, now division director for women’s and fetal imaging at Baylor, and Dr. Roberto Romero, chief of the Perinatology Research Branch of the NICHD/NIH. Using the prototype Dr. Deter developed, the team conducted a large longitudinal fetal growth study that produced eight papers from 2014 to 2018 and freely available web-based software for implementing individualized growth assessment (igap.research.bcm.edu). This work culminated in a 2018 review article in the American Journal of Obstetrics & Gynecology Supplemental Issue on fetal growth assessment, for which he served as one of the guest editors.

Dr. Deter welcomes attention to the field that he helped develop over the past 40 years, and the mathematics behind it. “If we can accurately measure the growth potential of each fetus, and detect when things go wrong, we are in a much better position to learn a great deal more.”

This illustration evaluates a small fetus using Individualized Growth Assessment (IGA). For each of the anatomical size parameters, including estimated fetal weight (EFW), red data points are used to calculate 2nd trimester growth velocity as an estimate of fetal growth potential. IGA is then used to generate an expected third trimester growth trajectory that is compared to actual fetal ultrasound measurements (black dots). Blue shaded areas represent the expected reference ranges for that fetus. The Fetal Growth Pathology Score (FGPS1) measures 3rd trimester growth pathology using all anatomic parameters and time points (Deter RL, et al. Am J Obstet Gynecol 2018;218:S656).
When the demand for Zika testing began straining the CDC’s resources, Baylor’s OB/GYN team quickly responded.

“Within months of the pandemic starting we had a current strain of the virus, enabling us to work hand-in-hand with our molecular diagnostics partners to rapidly develop and implement testing for our patients,” says Dr. Kjersti Aagaard, vice chair of research for the department of OB/GYN.

It was a breakthrough in the clinical management of their patients, says Dr. Martha Rac, part of the team of maternal-fetal medicine specialists at Baylor’s infectious disease clinics.

“It’s also a great example of the strides being made in clinical care and research through dynamic, collaborative relationships across this institution,” adds Dr. Aagaard.

In 2017 they continued to expand on that testing to overcome current limitations, improving Zika detection and diagnosis. “Because long-term antibodies don’t yet exist, blood and urine testing can be negative, but the patient may have been infected months earlier,” explains maternal-fetal medicine specialist Dr. Catherine Eppes from the infectious disease clinics. “We may be testing too late.”

“The answer may come with placental testing,” says Dr. Aagaard. The team noticed a clear clinical trend where some women continue to have detectable virus in their blood or urine for months after initial infection, suggesting the virus replicates in the placenta – a suggestion they
aggressively pursued. Their research found the placenta may serve as a permissive reservoir and portal for fetal transmission of the Zika virus.

Current limitations in clinical care also guided their research on using imaging to detect early changes in the baby’s brain, for earlier diagnosis of congenital Zika virus during pregnancy. “Measuring the head size for congenital microcephaly as evidence of fetal infection is not an optimal screening method,” says Dr. Eppes, “but rather too little too late.”

Working with a center in Colombia, one of the countries most affected by Zika, Baylor fetal surgeon Dr. Magdalena Sanz Cortes led an international study that analyzed ultrasound and MRI images from Zika-infected babies with fetal brain abnormalities. “Collaborating with Baylor’s radiology team, we used volumetric analyses to identify abnormalities in the volume of each part of the brain, and diffusion-weighted imaging to assess brain microstructural changes – techniques never before used with Zika babies,” she explains.

“That collaboration is vital to the work they do every day as maternal-fetal medicine specialists, notes Dr. Sanz Cortes, and must include those who care for the babies long term. “To understand the probability that a fetus we are taking care of in utero will develop certain complications after birth, we need to liaise with radiology, neurology, neonatology, pediatric development and others to interpret assessments, identify risk factors for these babies, and improve our understanding of their long-term outcomes, especially the neurodevelopmental outcomes, enabling more effective management of each unique pregnancy we treat.”

In addition to a host of other wide-ranging research activities in 2017, the OB/GYN department participated in NIH-sponsored multicenter clinical trials to enhance the treatment of common and complex problems in pregnancy. Baylor OB/GYN was the first center in the United States to participate in the Moderate TOTAL (Tracheal Occlusion To Accelerate Lung Growth) trial for expectant moms with a baby with moderate congenital diaphragmatic hernia, and the only U.S. site for a study on delayed cord clamping in preterm infants. “We are known for our high retention rate in studies, a reflection of the high-quality clinical care we provide,” says Dr. Aagaard.
BUILDING FAMILIES THROUGH RESEARCH-DRIVEN FERTILITY CARE

Blesson Chellakkan Selvanesan, MSc, MPhil, PhD
Assistant Professor
Division of Reproductive Endocrinology and Infertility
“Our research and resources set the Family Fertility Center apart, providing unique insights into reproductive health that improve fertility treatment and outcomes for our patients,” says Dr. Blesson Selvanesan.

Those resources include a state-of-the-art lab, the latest technologies, and fertility experts skilled at translating new discoveries into improved clinical care, adds Dr. Selvanesan, assistant professor in Baylor’s division of Reproductive Endocrinology and Infertility (REI). “Our research labs were designed with input from researchers at Harvard, the University of Michigan, and the University of Washington, and made possible by the generous support of Texas Children’s Hospital to promote translational research to help infertile couples. It’s a unique facility.”

Located in Texas Children’s Pavilion for Women, the Family Fertility Center is staffed by Baylor REI specialists. In 2017, the team’s research focused on three key areas: quality control and quality improvement, disease research and new technologies.

“We’re improving quality through morphokinetics, using time-lapse imaging to track and evaluate embryo development, enabling us to identify the healthiest embryo for implantation,” explains Dr. Selvanesan. “The time-lapse Embryoscope used in our clinical IVF lab is found in only one other IVF lab in Texas, and we are the only research facility in the country to use this device.” Morphokinetics is also routinely used on mouse embryos to test the quality of the culture media used – the solution in which the embryo grows – to optimize embryo development.

“Various culture media companies sell different formulations; we test them and use the best among them. The media we use gives optimum embryo growth and induces the least amount of oxidative stress on the embryo, which negatively impacts embryo quality,” he says.

“Our focus on disease research is improving our understanding of conditions that impact fertility, including polycystic ovary syndrome (PCOS),” says Dr. Selvanesan. The most common ovulatory disorder in the world, PCOS is a frequent cause of infertility, resulting in impaired egg maturation, low rates of fertilization, blastulation (embryo development) and implantation, and higher miscarriage rates.

To better understand how PCOS affects egg quality and embryo development, the team studied eggs from two mouse models with PCOS – one lean, one obese. Their novel findings included mitochondrial abnormalities and dysfunction in the oocyte itself – the first study showing evidence women with PCOS also develop flawed eggs, he notes. Additionally, the mouse studies suggest PCOS could affect eggs differently in lean and obese populations, while human embryo studies from PCOS patients show faster development than matched controls – observations they continue to investigate.

In a collaborative study of type 2 diabetes with Dr. Chandra Yallampalli’s lab at Baylor, a novel lean rat model was used to study how sex hormones affect metabolism. “We showed that a low-protein diet during pregnancy can cause adult onset of metabolic disease,” says Dr. Selvanesan. “We also found strong sex differences in the presentation of the disease.” An application for NIH funding to expand this research has received favorable reviews, he adds.

The team’s technology research included new cryopreservation techniques for patients interested in fertility preservation, development of culture media in-house to improve embryo growth, and a new non-invasive method of screening embryo quality.

“As the embryo grows in culture media, it secretes RNA, DNA, proteins and other factors,” he explains. “We’re investigating the ability to screen this media and predict the embryo’s health – a valuable substitute over invasive biopsy techniques currently used for testing embryos.”

“We are also excited about a time-lapse growth pattern observed in human embryos that is under development to predict which embryo will develop into a pregnancy,” he adds. This non-invasive technique is showing a strong predictive value and the information is already being used to benefit their patients, he notes.
$5,341,286
Total research funding

$4,472,561
Total NIH funding (includes contracts, subawards and indirects)

139
Presentations at national and international meetings

43
Faculty principal investigators with active protocols

“We are known for our high retention rate in studies, a reflection of the high-quality clinical care we provide.”
<table>
<thead>
<tr>
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<th>PUBLICATIONS</th>
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<td>Maternal and Fetal Imaging</td>
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<td>Reproductive Endocrinology and Infertility</td>
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<td>Reproductive Psychiatry</td>
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</tbody>
</table>
We are home to one of the nation’s most diverse training grounds. Our outstanding facilities and programs attract outstanding candidates, producing scientists and healthcare providers destined to make unprecedented gains in OB/GYN care and outcomes.
CREATING LIFELONG LEARNERS

Charles C. Kilpatrick, MD, MEd
Associate Professor
Vice Chair of Education
Residency Program Director
Division of Female Pelvic Medicine and Reconstructive Surgery

Celestine Tung, MD, MPH
Assistant Professor
Division of Gynecologic Oncology
Associate Residency Program Director, Surgical Education

“Baylor is way ahead of the game.”
Through collaboration across specialties, and an emphasis on quality and safety, Baylor’s OB/GYN education programs are preparing learners for the future of women’s healthcare.

The vital role collaboration plays in OB/GYN care today is evident in new offerings like the Women’s Mental Health fellowship, only the second program of its kind in the nation, says Dr. Lucy Puryear, director of The Women’s Place – Center for Reproductive Psychiatry. “This exciting collaboration between OB/GYN and psychiatry will provide training to improve women’s mental health care across their lifespan,” she says. The one-year program, fully funded and slated for 2018, focuses on the treatment of women’s mental health issues around major reproductive milestones including pregnancy, postpartum and menopause.

OB/GYN has also teamed up with critical care medicine to offer a new combined Maternal-Fetal Medicine (MFM)/Critical Care fellowship, says Dr. Steven Clark, MFM fellowship director. “Our MFM fellows now have the opportunity to complete six months of training in critical care surgery and become ‘double boarded’ in both specialties.”

Another collaborative offering, Baylor’s Pediatric-Adolescent Gynecology fellowship, combines training across three specialties – pediatrics, OB/GYN and surgery – to meet the unique needs of these young patients.

More collaborative fellowships are underway, notes Dr. Kilpatrick, giving OB/GYN residents new opportunities to increase their contributions to women’s healthcare. “We also offer fellowships in Global Women’s Health, Minimally Invasive Gynecologic Surgery, Perinatal Surgery, Reproductive Endocrinology and Infertility (REI), and coming soon, a Hospitalist fellowship.”

Hospitalist medicine – physicians who care solely for hospitalized patients – is the fastest growing medical specialty in the U.S. “The goal of this fellowship is to train OB/GYNs to fill the increasing demand for these specialists, improving patient care, safety and outcomes,” says Dr. Karen Schneider, director of the Hospitalist division. “OB hospitalists are available onsite 24/7 to respond to obstetric emergencies and deliveries, improving patient satisfaction and alleviating demands on primary care providers.”

Quality and safety are common themes across the OB/GYN education mission, distinguishing Baylor’s programs and graduates. A prime example: the new mandate on Fundamentals of Laparoscopic Surgery (FLS) training, making it a prerequisite for board certification for OB/GYN residents graduating after May 31, 2020.

“Baylor is way ahead of the game,” says Dr. Kilpatrick. “Not only are we one of the few residency programs where FLS certification is already a requirement for our graduates, our goal is for them to complete the training in their second year. By mastering these basic surgical skills sooner, our residents can build on their OR skills throughout their third and fourth years, improving the quality and safety of care they provide long before graduating. And we set the expectation that our residents are lifelong learners.”

He credits the success of their FLS training program to the extensive work of Dr. Celestine Tung, associate program director and a Baylor OB/GYN – all while pursuing her second master’s degree, setting her own example as a lifelong learner.
**Education**

**2017 BY THE NUMBERS**

- **173** Medical students rotating through OB/GYN core clerkship
- **48** OB/GYN residents
- **26** Physician assistant students
- **25%** of 2017 graduating OB/GYN residents entered academics or fellowship
18 Fellows

13 BCM medical students pursuing OB/GYN residency programs

100% matched to OB/GYN residency programs in March 2017

5 from top 10% of their class

4 Norton Rose Fulbright Faculty Excellence Awards

For Teaching and Evaluation:
Jennifer Bercaw-Pratt, MD
Laurie Swaim, MD
Celestine Tung, MD, MPH

For Development of Educational Materials:
Jennifer Dietrich, MD

“Quality and safety are common themes across the OB/GYN education mission, distinguishing Baylor’s programs and graduates.”
We go where the OB/GYN needs are greatest. From underserved populations in nearby neighborhoods to underdeveloped nations across the globe, we are bringing life-changing healthcare and hope where it is needed most.
CREATING HEALTHIER TEXAS WOMEN THROUGH ACCESS TO CARE
“In an ideal world, healthcare for all women would be continuous, not solely based on pregnancy intervals,” says Dr. Lisa Hollier.

Progress is being made, thanks to the Healthy Texas Women program. Launched in 2016 by Texas Health and Human Services, the program helps low-income women access family planning and preventative healthcare services – including crucial gynecologic care that might not otherwise be accessible, says Dr. Hollier, medical director of The Centers for Children and Women.

“The Healthy Texas Women program allows us, as providers of underserved women, an opportunity to provide more comprehensive, continuous care,” she says. “Historically, women whose pregnancies were covered by Medicaid lost that coverage 60 days after delivery. Today, they can automatically enroll in this new program and receive vital well-woman care.”

The Centers for Children and Women, in collaboration with Texas Children’s Health Plan, provide underserved populations in Houston easy access to high-quality healthcare. The focus is on communities with large populations of children and pregnant women, and access challenges. “Our hope is that rather than lose these patients after pregnancy, we’ll be able to continue caring for them, improving their health and wellness and enabling easy entry to prenatal care when needed,” says Dr. Hollier.

To date, they have treated more than 1,300 women with Healthy Texas Women coverage. “I remember the first time I provided preconception counseling to a woman who traditionally wouldn’t have access to that type of visit,” she says. “To have that opportunity to talk about things like an appropriate interval between pregnancies, nutrition, and prioritizing her health before pregnancy, it really stood out to me how exciting that was.”

Another patient without prior access to care, a 26-year-old single mother with vaginal bleeding, had sought treatment in local emergency rooms before enrollment in the program and visiting The Center. “Her pap smear and biopsy came back abnormal,” says Dr. Hollier. “After additional evaluations, she was diagnosed with stage 3 cervical cancer and began radiation.” She has since improved enough to return to work.

“Stories like this drive home the critical importance of access to care and remind our team that we must make the most of every opportunity we have to impact the lives of the women we encounter,” she notes.

“The Healthy Texas Women program allows us an opportunity to provide more comprehensive, continuous care.”
Dr. Hollier’s Path to ACOG Presidency Begins

On May 8, 2017, Dr. Lisa Hollier took office as president-elect of ACOG, the American College of Obstetricians and Gynecologists, an organization of 58,000 OB/GYNs and partners dedicated to improving women’s health.

Following a one-year term, she was sworn in as the 69th president of ACOG on April 29, 2018.

“My initiatives are all related to maternal mortality,” says Dr. Hollier. “We will be advocating for state-based maternal mortality reviews. We will partner with states and hospital systems to promote a culture of patient safety. My presidential task force will also work across disciplines to develop guidelines to better identify women with cardiac disease before, during and after pregnancy – as well as those who are at increased risk due to previous pregnancy complications, including preeclampsia, gestational diabetes, and growth restricted babies.”

“Together, we need to raise awareness that heart disease is the leading cause of maternal mortality and the number one killer of women overall,” she adds.
### The Centers for Children and Women
#### 2017 BY THE NUMBERS

<table>
<thead>
<tr>
<th>Metric</th>
<th>Count</th>
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<tr>
<td>Women receiving OB/GYN care</td>
<td>4,424</td>
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<td>Women who delivered their infants with The Centers</td>
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<td>Women screened for depression</td>
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<td>Women who chose CenteringPregnancy®</td>
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<td>Women who delivered preterm</td>
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“...we must make the most of every opportunity we have to impact the lives of the women we encounter.”
MAKING GLOBAL GAINS IN OB/GYN HEALTHCARE, TRAINING AND OUTCOMES

Through our Global Women’s Health Initiative, we’re addressing the critical OB/GYN needs of women in some of the poorest countries in the world, with transformative results.

In 2017, those efforts took us aboard the Mercy Africa, a massive civilian hospital ship docked in Cameroon. On this floating hospital, at the request of the international charity Mercy Ships, Baylor OB/GYNs Rachel Pope and Jeff Wilkinson spearheaded training for local surgeons on the repair of obstetric fistula, a devastating childbirth injury that leaves women leaking urine, feces or both. The World Health Organization (WHO) estimates more than 2 million young women in Asia and Africa live with untreated obstetric fistula, often in shame and isolation.

“We awarded our first certificate of training to a Cameroon OB/GYN, Dr. Inna Rakya, who is now competent at performing fistula surgeries in her community,” says Dr. Pope, the medical director of the fistula center in Malawi. “We’ll be training more local physicians at the ship’s next port, in Guinea.”

Dr. Wilkinson and team are reaching fistula patients across Africa through ongoing collaboration with the Freedom from Fistula Foundation. “They have the sites, the nurses, and the patients; we help with the surgeries,” he says.
He also returns regularly to the 48-bed fistula center he helped establish in Malawi, working alongside Baylor’s team on the ground to provide surgical care and training.

Another key area of focus is a collaborative project underway to expand Malawi’s Area 25 Health Center, an outlying facility that helps women in rural areas access critical OB/GYN care, preventing delays that cause pregnancy and childbirth complications. “We’re building a four-room operating suite that will enable cesarean deliveries and other lifesaving care for these mothers and babies,” he says. “The operating theater will also provide unprecedented opportunities to train local physicians, further alleviating unnecessary maternal and infant morbidity and mortality.”

“In addition, we remain a vital component of Kamuzu Central Hospital, a large referral hospital in Malawi, where our faculty and fellows are providing clinical care, consulting on complex cases, and training Malawian OB/GYN residents,” he continues. “In 2017, the Malawian residency program, which Baylor faculty helped start, graduated the first two OB/GYN residents, a huge step forward for women’s healthcare in this country. We currently have 16 residents through the collaboratively developed program – the first in the country – at the Malawi College of Medicine.”

“The vast majority of the work we do is made possible through generous donors,” adds Dr. Wilkinson. “Through external funding and cost-effective programs, we’re bringing transformative care to the sickest women and babies in the poorest regions of the world and training local providers to build on that success.”
Teen Clinic
2017 BY THE NUMBERS

19,171
Patient visits

8,661
Sexually transmitted infection (STI) screenings

4,975
New patients

4,452
Returning patients

3,070
Immunizations given

675
Sports physicals
Midwifery
2017 BY THE NUMBERS

10,169
Certified Nurse Midwife (CNM) outpatient visits at Harris Health System

2,169
CenteringPregnancy® group prenatal visits at Harris Health System

445
Vaginal deliveries by CNM in Harris Health System

28%
Labor induction rate for CNM patients

1.3%
Low birthweight rate for CNM patients
We are improving the health and well-being of women at every stage of life, from preconception to menopause, through the highest-quality, comprehensive OB/GYN care and expertise across a full range of subspecialties.
WHERE WE PRACTICE

You’ll find our physicians treating patients in a wide range of healthcare settings throughout the Texas Medical Center and the greater Houston area, from private hospitals to inner-city clinics to specialized centers in suburban communities. Through these diverse practice locations, we are improving access to the highest-quality OB/GYN care, encountering and treating an incomparable range of women’s health issues, and gaining invaluable knowledge to improve the lives of women worldwide.

TEXAS CHILDREN’S PAVILION FOR WOMEN

This landmark facility is home to our primary private practice, where we’re meeting the OB/GYN needs of women across their lifespan, from preconception through menopause. We are providing sought-after specialized services to a record number of patients, including nationally recognized fetal intervention and maternal care for high-risk pregnancies, pelvic floor and urogynecologic surgical procedures, and robotic gynecologic surgery.

BEN TAUB HOSPITAL

Through this highly acclaimed Harris Health System institution, our physicians are providing comprehensive OB/GYN care to thousands of underserved women in the nation’s third most populous county, and improving birth outcomes for healthier generations to come.

TEXAS CHILDREN’S HOSPITAL

Within one of the nation’s largest pediatric hospitals, you'll find our fellowship-trained pediatric and adolescent gynecologists providing expert medical and surgical care to improve the lives of young girls with gynecologic conditions, including rare congenital anomalies of the female reproductive system. We offer the only established program in Texas for the surgical treatment of pediatric and adolescent gynecologic disorders.

BAYLOR ST. LUKE’S MEDICAL CENTER

Our gynecologic surgeons at Baylor St. Luke’s Medical Center are offering women more options than ever before for the surgical treatment of gynecologic conditions, including the latest advancements in minimally invasive procedures for shorter hospital stays and faster recovery.
HOUSTON METHODIST HOSPITAL

Through the onsite Maternal-Fetal Medicine Clinic, we’re providing OB/GYN patients at this leading Houston hospital direct access to our renowned, specialized care for high-risk pregnancies, a collaborative effort that is improving maternal and fetal outcomes.

MICHAEL E. DEBAKEY VETERANS AFFAIRS (VA) MEDICAL CENTER

Our affiliation with one of the largest VA hospitals in the nation enables us to proudly serve the healthcare needs of female veterans in Harris County and 27 surrounding counties. We’re honoring the contributions and sacrifices these women made in service to their country by providing the highest-quality women’s healthcare available today, from primary OB/GYN care to a wide range of specialized services.

THE CENTERS FOR CHILDREN AND WOMEN

Through this innovative, collaborative effort with Texas Children’s Health Plan, we’re addressing the needs of communities known for large populations of children and pregnant women and high rates of preterm births.

TEXAS CHILDREN’S MATERNAL-FETAL MEDICINE AND OB/GYN CLINICS

Local clinics in The Woodlands, Northwest Houston, West Houston, Sugar Land, Pearland, and Baytown extend our leading-edge OB/GYN care out into the communities, making it easier for women to stay on top of their healthcare needs.

HARRIS HEALTH SYSTEM COMMUNITY CLINICS

We’re improving access to prenatal care, family planning, and other outpatient services through Harris Health System clinics throughout the Houston area, including Casa de Amigos Health Center, Gulfgate Health Center, Martin Luther King Jr. Health Center, Smith Clinic, and Vallbona Health Center.
OUR PRACTICE LOCATIONS
### PRIVATE PRACTICE LOCATIONS

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<td>Houston Methodist West Hospital</td>
<td>18400 Katy Freeway, Ste. 540</td>
<td>Houston, TX 77094</td>
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<tr>
<td>9</td>
<td>Methodist Sugar Land Hospital</td>
<td>Medical Office Building 3</td>
<td>Sugar Land, TX 77479</td>
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<td>10</td>
<td>Pearland</td>
<td>9003 Broadway Street</td>
<td>Pearland, TX 77584</td>
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<tr>
<td>11</td>
<td>Baytown - Telemedicine</td>
<td>2610 North Alexander Drive, Ste. 208</td>
<td>Baytown, TX 77520</td>
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### PUBLIC PRACTICE LOCATIONS

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<thead>
<tr>
<th></th>
<th>Location</th>
<th>Address</th>
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<tbody>
<tr>
<td>1</td>
<td>Ben Taub Hospital</td>
<td>1504 Taub Loop</td>
<td>Houston, TX 77030</td>
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<tr>
<td>2</td>
<td>Texas Children’s Health Plan - The Center for Children and Women at Greenspoint</td>
<td>700 North Sam Houston Pkwy W.</td>
<td>Houston, TX 77067</td>
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<td>3</td>
<td>Texas Children’s Health Plan - The Center for Children and Women - Southwest Houston</td>
<td>9700 Bissonnet Street</td>
<td>Houston, TX 77036</td>
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<tr>
<td>4</td>
<td>Casa De Amigos Health Center</td>
<td>1615 North Main Street</td>
<td>Houston, TX 77009</td>
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<td>5</td>
<td>Gulfgate Health Center</td>
<td>7550 Office City Drive</td>
<td>Houston, TX 77012</td>
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<td>6</td>
<td>Martin Luther King Jr. Health Center</td>
<td>3550 Swingle Road</td>
<td>Houston, TX 77047</td>
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<td>7</td>
<td>Smith Clinic</td>
<td>2525-A Holly Hall</td>
<td>Houston, TX 77054</td>
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<tr>
<td>8</td>
<td>Vallbona Health Center</td>
<td>6630 DeMoss Street</td>
<td>Houston, TX 77074</td>
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IMPROVING HIGH-RISK PREGNANCY OUTCOMES THROUGH MATERNAL-FETAL TRANSPORTS

Karin Fox, MD, MEd
Assistant Professor
Associate Fellowship Director
Co-Chief, Maternal-Fetal Surgery Section
Division of Maternal-Fetal Medicine
By land and by air, our maternal transport service is expediting critical care for high-risk pregnancy patients, improving maternal and fetal outcomes. “There’s no better incubator in the world than a stable mom,” says Dr. Karin Fox, medical director of Maternal Transport.

Launched in 2017, the interfacility transport service is a collaborative effort between Baylor’s maternal-fetal medicine team, specialists in the treatment of high-risk pregnancies, and Texas Children’s renowned Kangaroo Crew, specialists in their own right with three decades of pediatric intensive care transport experience. The destination: Texas Children’s Pavilion for Women, where these Baylor specialists care for the most complicated pregnancies and critically ill babies – making it a primary referral site.

Transfers are made through a fleet of specially equipped ambulances, for transports within 90 miles, and a fixed-wing aircraft, for transfers within a 200-mile radius. Treatment begins the moment the crew arrives, enabling earlier intervention for these critically ill patients.

“We’ve paired up with an outstanding team led by Dr. Jeanine Graf, the pediatric medical director for the Kangaroo Crew, to help the highest-risk mothers and babies get here when they need us most,” says Dr. Fox.

Among those transfers: stable placenta accreta patients; hypertensive patients with severe preeclampsia; patients with severe maternal complications requiring maternal ICU care; and pregnancies involving fetal conditions or complications, such a cardiac defect.

“We leveraged the Kangaroo Crew’s expert team of EMTs, critical care nurses, respiratory therapists, and leadership and added labor and delivery nurses experienced in high-risk obstetric care,” says Dr. Fox. The entire team undergoes extensive training in critical care transports, including simulated emergencies, she notes. Back at the “command station,” a maternal-fetal medicine specialist oversees and advises on every transport.

When a call for help comes in, a multidisciplinary team jumps into action, assessing the need and meticulous collaborating and coordinating the patient’s successful transfer.

“We look forward to helping our partners in the community transfer patients who need the specialized services we offer, and to keeping that mom and baby together.”
It shows, in her efforts spearheading quality and safety initiatives at both Texas Children’s Pavilion for Women and Ben Taub Hospital, and in the results for moms and newborns.

In 2017, the Pavilion quality metrics included an early elective delivery rate of 0 percent, an antenatal steroid administration rate of 100 percent for women at risk of preterm delivery, and an episiotomy rate of 2.6 percent, all below national benchmarks.

The latter caught the attention of The Leapfrog Group, a national patient safety organization. “We were honored to be commended for our ‘excellent work’ reducing the episiotomy rate,” says Dr. Davidson. “We were invited to share our efforts in a case study to promote similar gains at other hospitals.”

Another closely monitored metric, their obstetric adverse event rate, decreased an additional 25 percent in 2017, she notes, with an overall decrease of 59 percent since the Pavilion opened in 2012.

“Quality and safety has always been my passion,” says Dr. Christina Davidson.

Catherine S. Eppes, MD, MPH
Assistant Professor
Co-Director Obstetrics Infectious Disease Clinics
Division of Maternal-Fetal Medicine
Baylor College of Medicine
Chief of Obstetrics, Ben Taub Hospital

Christina Davidson, MD
Assistant Professor
Division of Maternal-Fetal Medicine
Vice Chair, Quality and Patient Safety
Obstetrics and Gynecology
Baylor College of Medicine
Texas Children’s Pavilion for Women
Dr. Davidson points to several initiatives contributing to their progress, including: a new charge hospitalist dedicated to the oversight of quality and safety in labor and delivery; additional training on fetal heart rate monitoring for all physicians; and individualized quality metric reports for each provider, increasing awareness of personal performance.

“In 2017 we began the process of becoming a recognized Alliance for Innovation on Maternal Health (AIM) hospital in Texas, a status we enjoy today, joining this national data-driven initiative to reduce severe maternal morbidity and mortality,” she continues. “We’ll be implementing AIM’s evidence-based practices, known as safety bundles, for OB hemorrhage, hypertension, and a maternal early warning system, MEWS.”

At Ben Taub Hospital, also staffed by Baylor OB/GYN faculty, AIM initiatives are already in place. “By sharing best practices across the institutions where we practice, we’re able to expedite improvements in patient care and outcomes,” notes Dr. Davidson.

Part of the Harris Health System, Ben Taub was the first hospital in Texas to successfully enroll in AIM.

“The safety guidelines implemented have been transformative, improving patient care, outcomes and staff communication,” says Dr. Catherine Eppes, chief of obstetrics and medical director for obstetrics quality at Ben Taub. “To date, AIM guidelines have resulted in a 20 percent reduction in severe maternal complications for our patients.”

“In 2017, we continued implementation of MEWS and our Surgical Site Infection (SSI) bundle,” she says. “We also began the second phase of implementation for the Postpartum Hemorrhage bundle.”

Their commitment to quality and safety earned Ben Taub’s labor and delivery unit the Silver Beacon Award of Excellence in 2017 from the American Association of Critical-Care Nurses – the only recipient in the United States and Canada, notes Dr. Eppes, reflecting the exceptional care provided.

“We’ve also started tracking patient outcomes based on social determinants of health, race and ethnicity, data that will help us better understand the barriers to providing patients the best possible outcomes,” she says.

Baylor OB/GYN team members from both institutions are contributing to state quality and safety initiatives, including the Texas Collaborative for Healthy Mothers and Babies (TCHMB). “Dr. Eppes and I serve on the executive committee of this perinatal quality collaborative,” says Dr. Davidson, “where we’ll be assisting hospitals around the state with implementing MEWS and other AIM safety bundles.”

“We’re also preparing for maternal level of care designations in Texas, a process designed to ensure patients are cared for at an appropriate hospital,” she adds. One of several Baylor faculty members selected to assist with the statewide designation process, Dr. Davidson is passionate about helping others assess and improve their performance. “Quality and safety is not a competition,” she says. “We only win when every hospital is taking the best care of patients.”

“By sharing best practices across the institutions where we practice, we’re able to expedite improvements in patient care and outcomes.”
MAXIMIZING THE USE OF MINIMALLY INVASIVE HYSTERECTOMIES

Lubna Chohan, MD
Associate Professor
Division of Gynecologic and Obstetric Specialists
Baylor College of Medicine
Chief of Gynecology at Ben Taub Hospital
Hysterectomies are one of the most frequently performed procedures in the United States and the most common gynecologic surgery. At Harris Health’s Ben Taub Hospital, an increasing number of women are benefitting from minimally invasive procedures – today’s preferred approach, says the American College of Obstetricians and Gynecologists (ACOG).

“We’ve made great strides in reducing our abdominal hysterectomy rate by increasing vaginal and laparoscopic surgeries,” reports Dr. Lubna Chohan, chief of gynecology at Ben Taub.

In 2017, ACOG, a national organization dedicated to improving women’s health, recommended the use of these minimally invasive approaches whenever feasible, based on their well-documented advantages over abdominal hysterectomy, which requires a large incision. Those advantages include shorter hospital stays, faster recovery, and lower rates of infections and venous thromboembolism, says Dr. Chohan. Faster recovery also means faster return to work, she notes, an economic necessity for many of their patients.

“Today, every woman who’s going to have a hysterectomy should first be considered for a vaginal approach, the most preferable route since no incisions are required, followed by laparoscopic surgery, which involves small incisions near the naval, and then as a last option, traditional open abdominal surgery,” she says.

“Even in cases involving a large uterus, we’ve been successfully using medication to decrease uterine size over time, enabling a more minimally invasive route,” she adds.

“When open surgery is the only feasible route, we’re still able to expedite recovery through our ‘Enhanced Recovery After Surgery’ (ERAS) protocols.”

Since 2014, Ben Taub’s total abdominal hysterectomy (TAH) rate has dropped from 45 percent to 14.1 percent in 2017, compared to the national average of approximately 40 percent. (Source: Practice Patterns and Complications of Benign Hysterectomy Following the FDA Statement Warning Against the Use of Power Morcellation. Multinu F, Casarin J, Hanson KT, Angioni S, Mariani A, Habermann EB, Laughlin-Tommaso SK. JAMA Surg. 2018 Apr 11.)

Getting there involved several changes, says Dr. Chohan, including a new multi-step process to determine the least invasive route possible for each patient. The extensive preoperative planning and review process has made gynecology one of the most efficient surgical services in the OR.

It’s also been a valuable learning experience for the Baylor OB/GYN residents and fellows who train at Ben Taub, adds Dr. Chohan, a 2017 recipient of the Council on Resident Education in Obstetrics and Gynecology (CREOG) national teaching award. “The majority of their gynecologic surgery learning takes place here – quality and safety is a critical component of that education.”
HELPING WOMEN RECOVER FASTER AFTER SURGERY

Laurie S. Swaim, MD
Professor
Director, Division of Gynecologic and Obstetric Specialists, Baylor College of Medicine
Chief of Gynecology at Texas Children’s Pavilion for Women
Baylor’s gynecologic surgery patients are recovering more easily, feeling better faster, requiring less narcotic pain medication, and returning home sooner thanks to a new approach to care known as ERAS, or Enhanced Recovery After Surgery.

“Originally used in general and colorectal surgeries, ERAS replaces traditional surgery protocols with new practices that improve patient satisfaction, shorten hospital stays, reduce narcotic use, and enhance outcomes,” explains Dr. Laurie Swaim, chief of gynecology at Texas Children’s Pavilion for Women.

The new protocols provide a checklist of instructions for caregivers at every stage of the patient’s surgery, for a well-coordinated approach. The goal: to address and minimize the factors that traditionally keep patients from being able to go home after surgery, including pain, dehydration, and immobility.

There are four core elements of ERAS, says Dr. Swaim. “The first is comprehensive education to help patients and their families know what to expect during and after their surgery, and to encourage them to become active participants in that care. After instruction, patients understand expectations for pain management, activity and anticipated discharge. With ERAS, patients may have multiple assessments and educational sessions well before surgery with nutritionists, internists, and physical therapists, for example, to optimize their perioperative physical status, which has been shown to improve recovery.”

ERAS also involves a new school of thought on eating and drinking before surgery. “To maintain nutrition and hydration, the fasting period is decreased and patients are often asked to drink a carbohydrate-rich beverage two hours before their procedure,” she says, “improving the healing process, outcomes, and patient experience.”

A third major shift is the use of multimodal pain medication that achieves excellent pain control and reduces narcotic use, says Dr. Swaim. Decreased use of narcotics shortens the time to normal bowel function and lessens the chances of opioid addiction. Fourth, ERAS encourages early activity and eating after surgery. “Once patients are awake and alert after surgery, they are helped out of bed while still in the postanesthesia care unit. Patients are also able to eat regular food on the day of their procedures,” she notes.

While gynecology patients at the Pavilion for Women are already starting to benefit from some aspects of new ERAS protocols, such as multimodal analgesia, implementation is still in the early stages, says Dr. Swaim. “A large multidisciplinary group of dedicated representatives from every aspect of patient care is working to develop an ERAS program that best fits the needs of our patients. Our team is committed to taking advantage of every opportunity and resource to enhance the recovery and experience for patients after gynecologic surgery.”

The full benefits, she says, can be seen at Ben Taub Hospital, also staffed by Baylor OB/GYNs, where ERAS is up and running and improving the recovery process for hysterectomy patients. “Our patients are coming in less dehydrated through new guidance on pre-operative eating and drinking,” says Dr. Lubna Chohan, chief of gynecology at Ben Taub. “They’re more comfortable and using less narcotics thanks to new pain management regimens before and after surgery. They’re up and out of bed sooner. And many of our patients undergoing laparoscopic or vaginal hysterectomies are going home the same day as surgery.”
REDUCING MATERNAL MORTALITY THROUGH OBSTETRIC CRITICAL CARE

David Muigai, MBChB MMM
Assistant Professor
Department of Medicine, Pulmonary and Critical Care Division
Medical Director, Texas Children’s Pavilion for Women OB ICU
Intensivist, BSLMC, Texas Heart Institute
CV Surgery Recovery ICU
Intensive care units (ICUs) dedicated solely to obstetric patients are uncommon in the United States – a contributing factor to the nation’s high maternal mortality, says Dr. David Muigai. He’s on a mission to change both.

Dr. Muigai serves as director of critical care medicine at Texas Children’s Pavilion for Women, home to one of the few ICUs in the nation dedicated to obstetrics.

Here, critically ill expectant moms and their unborn babies receive the specialized intensive care required for the best possible outcomes. Patients are cared for around the clock by a dedicated ICU team that includes critical care physicians, maternal-fetal medicine specialists, and ICU nurses specially trained in lifesaving maternal and neonatal care.

“Our mission is to improve the health outcomes of critically ill pregnant women in Texas and beyond, contribute to the reduction of maternal mortality in this country, and serve as a regional center of excellence for obstetric critical care,” says Dr. Muigai.

While other ICUs do provide care for pregnant patients, “it makes a difference when pregnant women are the only focus of your ICU care,” he says. “Our patients benefit from a team dedicated solely to the care of women with severe pregnancy complications and therefore has the unique experience that comes with that. Our patients are cared for in a facility developed and equipped specifically for the treatment of pregnant patients. And once they deliver, there is an expert infrastructure in place to care both for the neonate and the postpartum mother.”

Referrals come from local and regional hospitals and international providers with patients in need of the unique expertise found at the Pavilion for Women, for example programs for placenta accreta and mothers with congenital heart disease. “The conditions we treat generally mirror the leading causes of maternal death,” says Dr. Muigai. They include cardiac disease, both congenital and acquired, hemorrhage, infections, and relatively rare or unique conditions not typically encountered by other U.S. hospitals such as malaria in pregnancy.

“There’s a large unmet need for obstetric ICU care out there,” he says, as evidenced by the inquiries they receive after sharing their work at conferences. In 2018, he looks forward to further improving outcomes for more critically ill moms and babies through a new larger obstetric ICU, part of Texas Children’s expansion of critical care services.

He credits Baylor’s culture of collaboration with the outcomes they’re able to achieve. “The very nature of these patients demands a multidisciplinary team. Not only are we treating two patients but we are also typically treating multiple conditions. Our Critical Care Medicine, Maternal-Fetal Medicine, Neonatology and Pediatric teams work closely with other Baylor specialties, including cardiology, nephrology, hematology, and surgical specialties, to meet the complex needs of each mother and baby.”
BRINGING SPECIALIZED CARE WITHIN REACH, THROUGH VIRTUAL VISITS
For OB/GYN patients in Baytown, Texas, a new telemedicine clinic brings the specialized care they need close to home.

“It’s been a game changer for families in this community,” says Assistant Director of Ambulatory OB/GYN Aimee Jackson. “Historically, these patients had to travel 30 miles to the Texas Medical Center for specialized OB/GYN care, often multiple times a week. In Houston traffic, that’s a lot of hours on the road and a lot of lost work time. For many families, it simply wasn’t feasible.”

“With telemedicine, we’re providing that same quality of care from the same specialists, but in a more convenient location for the patient – right there in her community. We’re giving these women their time back, enabling them to be more successful in their care, for healthier women, moms and babies.”

“A typical visit for a high-risk pregnancy patient with diabetes, for example, might include an ultrasound, followed by a consultation with the maternal-fetal medicine specialist, and a visit with a certified diabetic educator,” explains Jackson.

Patients are referred to the telemedicine clinic by their primary OB/GYN, just like at our other sites,” says Jackson. Currently two areas of specialized care are available: high-risk pregnancy care and reproductive psychiatry. “Services requested range from a simple anatomy scan to co-management of a complex pregnancy involving diabetes to reproductive psychiatry sessions.”

For Baylor OB/GYN reproductive psychiatry patients, the online sessions make it easier for women to quickly get the specialized care they need for the treatment of mental health issues related to the reproductive cycle, improving the lives of families and children.

The model has proven highly effective, earning the clinic a 99% patient satisfaction rate in the first year and the confidence of referring physicians. Our specialists like it too, adds Jackson. “With telemedicine, they can walk down the hall and be in another ‘virtual’ clinic. Less time on the road means more time to help our patients.”
Christina N. Davis-Kankanamge, MD
Assistant Professor
Division of Pediatric and Adolescent Gynecology

Chimsom T. Oleka, MD
Assistant Professor
Division of Pediatric and Adolescent Gynecology
Baylor’s division of Pediatric and Adolescent Gynecology is extending its reach, and its impact, through a new clinic inside Texas Children’s Hospital in The Woodlands.

Opened in 2017, the new clinic offers families in this community easy access to specialized medical and surgical care for the treatment of gynecologic disorders in young patients, including rare congenital anomalies of the female reproductive system. The Woodlands location is the latest addition to Baylor’s busy program – the largest of its kind in Texas.

Staffed by pediatric and adolescent gynecologists Drs. Christina Davis-Kankanamge and Chimsom Oleka, the clinic is changing the lives of patients ranging in age from newborn to 21 through the treatment of common to highly complex conditions. Both specialists were drawn to the opportunity to help young patients in this community get the clinical and surgical expertise their conditions require, “without time-consuming and intimidating trips to the medical center,” says Dr. Oleka.

Their expertise is attracting referrals from across this fast-growing region north of Houston, and beyond, says Dr. Davis-Kankanamge. Common conditions treated include vaginal and uterine abnormalities, vulvar diseases, bleeding disorders, ovarian cysts, infections, and abnormal puberty. “We also treat the reproductive needs of girls with developmental delays or other medical complications,” she notes.

“How girls feel about their bodies is closely connected to their sense of self-worth,” says Dr. Oleka. “Through evidence-based medical and surgical treatment, we’re restoring their health, their self-confidence, and for those facing complicated diagnoses and conditions, their hope.”

At their clinic inside Texas Children’s Hospital, they work alongside dozens of pediatric specialties, consulting and collaborating on complex cases to improve patient care and outcomes. “Whether it’s working with the endocrine team on disorders such as polycystic ovary syndrome (PCOS) or performing joint surgeries with urology, our patients can access the expert care they need, all in one place,” says Dr. Oleka.

They’ve also made diagnostic procedures easier for their youngest patients through a new hand-held endoscopy device, says Dr. Davis-Kankanamge. “Using this device, we’re now able to perform vaginoscopy in the office setting on girls who can’t tolerate a speculum, eliminating the need for anesthesia in the OR.” The procedure is commonly used to view inside the vagina in cases of unexplained vulvovaginitis or suspected foreign bodies.

Both doctors are passionate about making a difference outside the new clinic, as well. “Through community involvement and education, we look forward to improving the health literacy of adolescent girls and their parents, and empowering young women to take charge of their health,” says Dr. Oleka.

“Our patients can access the expert care they need, all in one place.”
Infectious disease outbreaks bring new attention to the dangers posed to expectant moms and their developing babies – and the need for specialized OB/GYN care.

At Baylor, that much-needed expertise is provided by Drs. Kjersti Aagaard, Catherine Eppes and Martha Rac, maternal-fetal medicine specialists dedicated to infectious disease care during pregnancy.

While they regularly treat patients with a wide range of infectious diseases, the Zika epidemic brought their expertise to the forefront of a worried community. The Zika virus, transmitted primarily through mosquito bites, may increase the risk of microcephaly, a rare neurological birth defect that causes babies to be born with abnormally small heads and have abnormal brain development.

“We were one of the first institutions to offer this collaborative team that could stay up-to-date on the evolving evidence and recommendations for Zika, and even develop testing for use with our patients,” says Dr. Rac. “We became a critical resource for patients, frontline providers and the community looking for the latest guidance on prevention, testing, and maternal and fetal care.”

In addition to serving as a regional referral site for Zika, they treat expectant moms with a broad spectrum of infectious diseases, including syphilis, hepatitis B and C, malaria, HIV, MRSA (methicillin-resistant staphylococcus aureus), ESBL (extended spectrum beta-lactamases), atypical urinary tract infections (UTIs), wound infections, intestinal parasites, toxoplasmosis, CMV (cytomegalovirus), tuberculosis (TB), and other emerging threats.

Patient care is delivered through dedicated clinics located in Texas Children’s Pavilion for Women, home of the first-in-Texas Zika clinic, and Ben Taub Hospital. The three specialists rotate across the two locations, providing services that include counseling, testing and diagnosis, treatment and delivery planning, and management of pregnancies with an infected baby. “We collaborate closely with neonatology,” says Dr. Rac, “streamlining the transfer of care at delivery, when needed, for Zika-exposed infants and other newborns.”
The team also provides travel guidance for pregnant women to prevent infection and the global spread of infectious diseases.

Locally, they partner with the public health department to drive down maternal infectious disease rates and prevent neonatal infections, says Dr. Eppes, chief of obstetrics at Ben Taub. “We work closely with their caseworkers to connect our patients with the programs and services they need to protect mom and baby, for example ensuring everyone in the household is vaccinated for hepatitis B.”

“Increasing public awareness also decreases perinatal transmission,” she adds. “It’s important to educate the community on the latest health risks – including the high rate of congenital transmission of HIV, syphilis, and hepatitis C in Texas – so we can address them.”

As Baylor faculty members, they are active researchers, collaborating on studies ranging from influenza during pregnancy to HIV-Zika co-infections to an international study on fetal brain imaging for Zika diagnoses. At the state level, Dr. Eppes and Baylor OB/GYN Judy Levison are participating in a CDC-sponsored National Fetal and Infant Mortality Review (NFIMR) program, examining congenital transmission of HIV and syphilis.

Dr. Eppes is also heavily involved in the American College of Obstetricians and Gynecologists Zika task force, serving as the Texas co-lead and collaborating with members of other infectious disease programs.

“Our goal,” she says, “is to be a center of excellence for infectious disease care for pregnant women, one of only a handful of such programs in the nation.”
SPECIALIZING IN OB/GYN CARE FOR SPECIAL NEEDS PATIENTS

Tara Harris, MD
Assistant Professor
Obstetrics and Gynecology
Division of Gynecologic and Obstetric Specialists
The Transition Medicine Clinic is a unique program that helps patients with complex childhood medical conditions or disabilities transition to adult healthcare,” explains Dr. Harris. Part of the Internal Medicine department, the clinic is the only one of its kind in Texas, and one of only a few in the nation.

When the need arises for adult OB/GYN care, Dr. Harris is there to help. “Most of my patients have never seen a gynecologist,” she says, “or they’ve aged out of pediatric gynecology care. Now they’re reaching adulthood and have typical women’s health needs, from well-woman exams to menstrual problems to gynecologic issues related to their underlying condition.”

Those conditions run the gamut from common to extremely rare, says Dr. Harris. “I see patients with spina bifida, cerebral palsy, seizure disorders, congenital heart conditions, postpediatric cancer, trisomy 13, VACTERL association, and ataxia-telangiectasia, among others.”

“It’s an extraordinarily heterogeneous patient population. Even those with the same baseline disorder have their own unique comorbidities and abilities. We also have patients who are outliving the life expectancy for their conditions, so their needs are new. The care has to be highly individualized.”

Her appointments are an hour long, which she says is essential to getting to know the patient and their needs, and explaining how she can help. Resistance from caregivers is a common barrier to gynecologic healthcare, she notes. “We spend a lot of time talking about the reason they were referred, what the exam will be like, and their treatment options. During that time they realize the care is going to be very personalized.”

Even something as simple as having a period can be a concern for patients who are non-ambulatory, causing hygiene issues and recurring infections, so menstrual suppression might be an option. Or maybe they’re experiencing heavy bleeding that is causing anemia and affecting other conditions,” she explains. “For some congenital heart disease patients, where pregnancy poses a serious health threat, contraception may be needed.”

While patient care is typically delivered at Texas Children’s Pavilion for Women, once a month she sees patients at the nearby Transition Medicine Clinic, combining visits for those who have more difficulty getting there. “It’s not a small thing to bring these patients in,” she notes. “Many are non-ambulatory or have very limited mobility. Some come from hours away.”

She also participates in monthly conferences at the clinic, collaborating with other specialties to improve the health of this growing patient population, and the healthcare process.

“One of the things we discuss is which patients will be going to the OR,” says Dr. Harris. “My patients in need of a pelvic exam may require anesthesia in the OR, much like pediatric patients. When sedation is required, the goal is to address as many of the patient’s needs as possible at one time, reducing the risk of anesthesia and the burden on these families. We aren’t there yet, but it’s on everyone’s radar.”

Through her work with the Transition Medicine Clinic at Baylor College of Medicine, Dr. Tara Harris has become a trusted OB/GYN provider for special needs patients and a passionate advocate for making healthcare easier for this growing patient population.
Department of Obstetrics and Gynecology
Private Clinical Practice Metrics
Including Texas Children’s Pavilion for Women, community MFM clinics, and Baylor St. Luke’s Medical Center
2017 BY THE NUMBERS

GENETIC COUNSELING

3,554
Unique patients

Photography by Allen Kramer
GYNECOLOGIC AND OBSTETRIC SPECIALISTS

31,967 Total outpatient visits
11,622 Unique patients
5,092 Surgeries and procedures
2,993 New patients
1,292 Total deliveries

GYNECOLOGIC ONCOLOGY

1,609 Total outpatient visits
800 Unique patients
414 Surgeries and procedures
246 New patients
HOSPITALISTS

10,904
Number of Women’s Assessment Center visits

4,903
Surgeries and procedures

496
Total number of deliveries

124
Total cesarean deliveries

MATERNAL-FETAL IMAGING

34,662
Ultrasound scans

3,475
Total outpatient visits

321
Fetal MRI evaluations performed by Department of Radiology
MATERNAL-FETAL MEDICINE

31,677 Total outpatient visits
13,975 Unique patients
312 Cesarean deliveries
25,918 Ultrasound visits and procedures
575 Total deliveries
33 Morbidly adherent placenta (MAP) cases
Department of Obstetrics and Gynecology Private Clinical Practice Metrics continued
Including Texas Children's Pavilion for Women, community MFM clinics, and Baylor St. Luke’s Medical Center
2017 BY THE NUMBERS

MENOPAUSE CENTER

207
New Menopause Center patients referred to gynecology

204
Menopause Center patients seen by reproductive psychiatry

191
Established Menopause Center patients seen by gynecology

159
Women self-referred to The Menopause Center for gynecology services

43
New Menopause Center patients referred to reproductive psychiatry

27
Women self-referred to The Menopause Center for reproductive psychiatry services
**PEDIATRIC AND ADOLESCENT GYNECOLOGY**

- **Outpatient visits**: 8,647
- **Unique patients**: 6,299
- **Unique patients treated for bleeding disorders**: 1,590
- **Procedures and surgeries**: 977
- **Unique patients treated for ovarian, fallopian tube or adnexal torsion**: 37

**PELVIC HEALTH**

- **Total outpatient visits**: 814
- **Surgeries and procedures**: 472
- **Unique patients**: 393
- **New patients**: 256
Department of Obstetrics and Gynecology
Private Clinical Practice Metrics continued
Including Texas Children’s Pavilion for Women, community MFM clinics, and Baylor St. Luke’s Medical Center
2017 BY THE NUMBERS

REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

9,496
Total outpatient visits

4,897
Surgeries and procedures

1,696
Unique patients

613
New patients

FAMILY FERTILITY CENTER: CY 2015 - 2017

New Infertility Visits
Follicular Scans
New Office Visit
Intrauterine Inseminations (IUIs)
Transvaginal Aspirations
Embryo Transfers
Viabilities
Surgery

2015
2016
2017
**REPRODUCTIVE PSYCHIATRY**

- **33,705** Screenings for postpartum depression (PPD) completed at Texas Children’s Pediatrics practices.
- **10,934** Women screened at the two week well-child visit.
- **6,145** Outpatient visits.
- **1,790** Unique patients.
- **1,185** New patients.
- **96%** Of Texas Children’s Pediatrics (TCP) practices screening mothers for PPD—up from 39% in 2016.
- **4** Number of times each mother is screened for PPD by TCP practices.

**TELEMEDICINE**

- **850** Total outpatient visits.
- **321** Unique patients.
Texas Children’s Fetal Center® Metrics
2017 BY THE NUMBERS

>2,350
Total fetal echocardiograms

866
Total evaluated cases

724
Anomaly evaluated cases

458
Fetal Center deliveries at the Pavilion for Women

142
Fetal intervention evaluated cases

124
Total fetal interventions and surgeries
FETAL CENTER REFERRED CASES IN CY 2017

- **Abdominal Wall Defects**: 21
- **CDH (Congenital Diaphragmatic Hernia)**: 2
- **Amniotic Band**: 35
- **CPAM/CCAM (Congenital Pulmonary Airway Malformations / Congenital Cystic Adenomatoid Malformations)**: 18
- **Fetal Tumors**: 5
- **LUTO (Lower Urinary Tract Obstruction)**: 18
- **Neck Mass**: 2
- **NTD (Neural Tube Defects)**: 51
- **Pleural Effusion**: 6
- **TTTS (Twin to Twin Transfusion Syndrome)**: 88
- **TRAPS (Twin Reversed Arterial Perfusion Sequence)**: 5
95 Fetal Intervention Procedures

29 Fetal Surgeries

TOTAL FETAL CENTER PROCEDURES IN CY 2017
Texas Children’s Fetal Center® Metrics continued
2017 BY THE NUMBERS

FETAL INTERVENTION PROCEDURES

- 52% Laser
- 27% IUT (Intrauterine Transfusion)
- 11% LUTO (Lower Urinary Tract Obstruction) Bladder Shunt
- 5% Pleural Effusion Shunt
- 2% Bipolar Cord Coagulation
- 2% RFA (Radiofrequency Ablation)
- 1% Other
FETAL SURGERY

- 45% Fetoscopic Neural Tube Defect (NTD) Repair
- 28% FETO (Fetal Endotracheal Occlusion)
- 10% EXIT (Ex Utero Intrapartum Treatment)
- 10% Open NTD Repair
- 7% Cardiac Intervention
Department of Obstetrics and Gynecology
Public Clinical Practice Metrics
Includes Harris Health Ben Taub Hospital
2017 BY THE NUMBERS

BENIGN GYNECOLOGY AND GYNECOLOGIC ONCOLOGY

3,073
Total surgeries performed

1,181
Total unique patients who had a surgical procedure

509
Total hysterectomies performed

BENIGN GYNECOLOGY (not including Gynecologic Oncology)
HYSTERECTOMY RATES

44.8%
TLH (total laparoscopic hysterectomy)

41.1%
TVH (total vaginal hysterectomy)

14.1%
TAH (total abdominal hysterectomy)
**BIRTHS**

- **2,708** Live births delivered by OB service
- **433** Live births delivered by midwifery

**DELIVERIES**

- **3,216** Total deliveries
- **971** Total cesarean deliveries
- **575** Repeat delivery for mother
- **434** Vaginal deliveries by midwifery
- **396** First delivery for mother

**MATERNAL-FETAL IMAGING**

- **9,749** Ultrasound scans
Department of Obstetrics and Gynecology
Public Clinical Practice Metrics continued

Includes Harris Health Ben Taub Hospital

2017 BY THE NUMBERS

**OB-EMERGENCY AND TRIAGE**

- **4,946** Total patient visits
- **2,788** Patients admitted
- **2,108** Patients treated and released

**OBSTETRIC PROCEDURES**

- **1,339** Total obstetric procedures (including cesarean deliveries)
- **30.2%** Cesarean delivery rate based on deliveries
- **27.2%** Vaginal birth after cesarean (VBAC) rate (308 Attempted VBACs)
- **16.4%** Primary cesarean delivery rate overall
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63. Dildy GA. A Call to Action for Data Definition Standardization and Core Outcome Sets. BJOG 2017 May 9. [Epub ahead of print] PMID: 28485898


78. Kopp DM, Bengtson AM, Tang JH, Chipungu E, Moyo M, Wilkinson J. Authors’ reply re: Use of a postoperative pad test to identify continence


84. **Turrentine MA.** Clinical Conundrums: Is One Clinician’s Quandary the Next Clinical Trial? Obstetrics and Gynecology. 2017 Jul;130(1):5-6. PMID: 28594780


87. **Valdes CT, Schutt AK.** Simon C. Implantation Failure of endometrial origin: it is not pathology, but our failure to synchronize the developing embryo with a receptive endometrium. Fert Stert. 2017 Jul;108(1):15-18. PMID: 28668151


104. Ghaghada KB, Starosolski ZA, Bhayana S, Stupin I, Patel CV, Bhavane RC, Gao H, Bednov A, **Yallampalli C**, **Belfort MA**, George V, Annapragada AV. Pre-clinical evaluation of a nanoparticle-based blood-pool contrast agent


110. Adams NR, Vasquez YM, Mo Q, **Gibbons W,** Kovanci E, DeMayo FJ. WNK lysine deficient protein kinase 1 regulates human endometrial stromal cell decidualization, proliferation, and migration in part through mitogen-activated protein kinase 7. Biol Reprod. 2017 Sep 1;97(3):400-412. PMID: 29025069


112. Srivaths LV, Zhang QC, Byams VR, **Dietrich JE,** James AH, Kouides PA, Kulkarni R; Hemophilia Treatment Centers Network Investigators. Differences in bleeding phenotype and provider interventions in postmenarchal adolescents when compared to adult women with bleeding disorders and heavy menstrual bleeding. Haemophilia. 2017 Sep 5. [Epub ahead of print] PMID: 28873279


117. Kohn JR, **Shamshirsaz AA,** Popek E, **Guan X,** **Belfort MA,** Fox KA. Pregnancy after endometrial ablation: a systematic review. BJOG 2017 Sep 27. [Epub ahead of print] PMID: 28952185


144. Cohen HS, Stitz J, Sangi-Haghpeykar H, Williams SP, Mulavara AP, Peters BT, Bloomberg JJ. Utility of quick oculomotor


156. Rohozinski J. Lineage-independent retrotransposition of UTP14 associated with
male fertility has occurred multiple times throughout mammalian evolution. R Soc Open Sci. 2017 Dec 20;4(12):171049. PMID: 29308242; PMCID: PMC5750009

