EXCELLENCE IN WOMEN’S HEALTH
Banner - University Medical Center Phoenix
West Tower Tribute

In 2019, the Banner - University Medical Center Phoenix campus saw some dramatic changes to help enhance services. One of those changes included the demolition of a main tower - otherwise known as the West Tower. As 2020 comes to a close, a new main entrance and lobby will soon take its place. Banner - University Medical Center Phoenix has become a premiere destination for highly-specialized academic medicine. The new entrance and lobby will be a welcome addition for new patients and visitors, with an improved navigation experience for those who seek care at this facility.
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Introduction

Adaptability, collaboration and innovative thinking punctuate our department’s focus for the 2020–2021 academic year.

The COVID-19 pandemic has catalyzed new approaches to e-health, interdisciplinary collaboration and enhanced camaraderie among faculty, administration and trainees. I am extremely proud of the actions of our faculty, residents and fellows to embrace the evolution of our “new normal” as we provide outstanding care while ensuring provider safety.

This new academic year marks the retirement of Dr. Laurie Erickson as our Residency Program Director. Dr. Erickson has been our Program Director since 2014 and has been the architect of our amazing residency program and the unparalleled culture for which our program has national acclaim for innovation and integrated teaching utilizing on-line lectures, flipped classroom, and bedside simulation. Our goal is to launch a multi-institutional Gynecological Oncology Fellowship in the near future.

Our research department has evolved with new leadership, membership and an enhanced focus on translational research. We have a newly constituted Women’s Health Research Program lead by Melissa Herbst-Kralovetz, PhD. that facilitates quality translational research and mentorship. Playing to our strengths, the department has continued to pursue growth in academia and teaching. Our residency program in Obstetrics and Gynecology University of Arizona College of Medicine - Phoenix is flourishing as we continue to attract the nation’s top medical school applicants. Our Minimally Invasive Gynecologic Surgery Fellowship is underway and in full complement. Our goal is to launch a multi-institutional Gynecological Oncology Fellowship in the near future.

Our national symposiums on Critical Care in Obstetrics and Minimally Invasive Gynecologic Surgery have received international acclaim for innovation and integrated teaching utilizing on-line lectures, flipped classroom, and bedside simulation. Our goal for 2020–2021 is to further incorporate the realms of virtual and augmented reality to compliment the learning styles of our millennial learners. Our Women’s Institute has integrated our Women’s Clinic, NICU, Labor and Delivery, and all inpatient women's care units to establish a unified model of care. In addition, we have a highly functional Women’s Institute -Patient Safety and Quality Committee that brings a strong collaborative team approach to quality care delivery.

We are looking forward to an academic year filled with adaptive harmony, happiness, and fulfillment!

Michael R. Foley, MD
Professor and Chair
Department of Obstetrics and Gynecology
University of Arizona College of Medicine Phoenix

“By breathing out, we care for others. By breathing in, we care for our self. We cannot survive unless we breathe both in and out.”

Mike Foley from INHALE-Reflections from a beginner on the Path to Mastery
Change is the theme of this year. Our residents and leadership team have demonstrated incredible resilience in the face of the current global pandemic, and they have been thoughtful about their duty to respond to injustice. We welcome a new class of residents and MIGS and MFM fellows with a focus on organizational agility. We do not know how things will change for us over the next year, but we do expect changes in public policy and health system policy to have a significant impact on how we work together. We are committed to creating a safe environment for our learners while continuing to provide the breadth of clinical and surgical experience that they require to ultimately practice independently.

It is with great sadness that we bid farewell to Dr. Erickson more than 6 years as our Program Director. We are committed to carrying on her legacy of kindness and excellence in resident education, recognizing that each of our residents is a uniquely talented person and making every effort to discover and augment their individual strengths. We move into the next interview season with a focus on diversity and inclusion and expect that virtual interviews will expand access to applicants who might have otherwise not had the opportunity to visit.
The Women’s Institute Core Faculty Members

Head Faculty
Michael R. Foley, MD  Professor & Chair of Obstetrics and Gynecology
Brian MacArthur, MD  Director of Obstetrics and Gynecology Residency Program

Division and Fellowship Directors
Matthew P. Borst, MD  Section Head, Gynecologic Oncology, Clinical Assistant Professor
Megan Cheney, MD  Section Head, The Women’s Center
Melissa Herbst-Kralovetz, PhD  Associate Professor of Basic Medical Sciences
C. Kevin Huls, MD, MSc  Center Director of Maternal Fetal Medicine, Director of MFM Fellowship, Clinical Associate Professor
Steven J. Laband, MD, MS  Section Head, Clinical Gynecology, Clinical Assistant Professor
Nichole Mahnert, MD  Clinical Assistant Professor
Shazia A Malik, MD, FACOG  Section Head, Female Pelvic Medicine and Reconstructive Surgery, Clinical Assistant Professor
Laura Mercer, MD  Clerkship Director of Obstetrics and Gynecology
Drew V. Moffitt, MD  Section Head, Reproductive Endocrinology-Infertility, Clinical Assistant Professor
Jamal Mourad, DO, FACOG  Center Director of Minimally Invasive Gynecologic Surgery, MIGS Fellowship Director, Clinical Associate Director
Suma Rao, MD  Neonatal Intensive Care Unit Director
Melissa Rothlisberger, MSN, RN, NE-BC  RN Director of Women’s Services and Neonatal Intensive Care Unit
Jordan H. Perlow, MD  Clinical Professor of OBGYN and Maternal Fetal Medicine
Silvana Qoshlili, MD  Assistant Professor, Medical Director of Department of Obstetric Anesthesia
Kelley T. Saunders, MD, MPH  Associate Program Director of OBGYN Residency Program
Michael A. Urig, MD  Vice-Chair, Center Director of Obstetrics and Gynecology, Clinical Associate Professor
Debra Wickman, MD, FACOG, NCMP, CSC  Section Head, Female Sexual Medicine, Clinical Assistant Professor
The Women's Institute Core Faculty Members

Michael R. Foley, MD
Professor and Chair Department of Obstetrics and Gynecology
University of Arizona College of Medicine Phoenix

Dr. Foley received his medical degree in 1984 from Chicago Medical School. His residency in Obstetrics and Gynecology and fellowship in Maternal Fetal Medicine were completed at The Ohio State University Hospital in 1988 and 1990, respectively. Dr. Foley has published numerous scientific articles and is a reviewer for several medical journals. He is a national and international lecturer as well as an award-winning teacher and author. He has also served as a board examiner in the subspecialty of Maternal Fetal Medicine. He is considered a national authority on Critical Care Medicine in Obstetrics. Dr. Foley is past president of the Society for Maternal Fetal Medicine-National (2008) and the recipient of the Society for Maternal Fetal Medicine Lifetime Achievement Award (2013). He is the lead editor of Obstetric Intensive Care: A Practical Manual, first edition published in the spring of 1997. The fifth edition was recently published in 2018 (McGraw-Hill). He is also a co-editor of Critical Care Obstetrics 6th ed. published in 2018 (Wiley-Blackstone). Dr. Foley is a founding instructor and faculty member for the Dan O’Keeffe, M.D. SMFM Academy for Leadership and Development which is in its sixth year of operation, training hundreds of medical leaders and professionals. He is a sought-after motivational speaker and mentor.

Dr. Foley is an eighth-degree black belt (Grand Master) and the co-founder of The Center for Humane Living, a 501(c)3 organization whose mission is: “To inspire all people to live peaceful and compassionate lives.” He has been teaching martial arts and conflict management out of his center for the past 30 years. Dr. Foley has written an award-winning book, The Art of Humane Living – Martial Arts as a Path to Peace (Chaos Publishing 2004). He has also authored the highly acclaimed Ancient Wisdom for Life Fulfillment (Chaos Publishing 2010) and most recently, INHALE-Reflections from a Beginner on the Path to Mastery (Chaos Publishing 2019). He is married to Dr. Lisa Dado who is a pediatric anesthesiologist. They have three children, Bonnie (32), Molly (28) and Michael (26).

Brian MacArthur, MD
Director of Obstetrics and Gynecology Residency Program

After earning a BA in Linguistics from Pomona College and an MD from Oregon Health and Science University, Dr. MacArthur completed his residency at what was then Banner Good Samaritan Medical Center in 2009. He joined a rural OB/GYN practice in eastern Oregon and remained there for four years before returning to Phoenix as an obstetric hospitalist with Phoenix Perinatal Associates. He has been active in department leadership since 2018 and became the OB/GYN Clerkship Site Director in the same year. He presented workshops at the 2018 and 2019 CREOG & APGO annual meetings and at the 2018 APGO Faculty Development Seminar. In 2019 he was recognized as an ACOG District VIII Mentor of the Year. Special interests include trauma in pregnancy and open source medical education. In 2020 he will become the Residency Program Director.
Kelley T. Saunders, MD, MPH  
Associate Program Director of OBGYN Residency Program

Dr. Kelley T. Saunders attended Arizona State University where she received a Bachelor of Science in mathematics. After receiving her master’s in public health and medical degree from the University of Arizona College of Medicine – Phoenix she graduated from our own University of Arizona College of Medicine Phoenix OBGYN Residency.

Upon completion of residency she joined our faculty as a clinical assistant professor at the University of Arizona College of Medicine – Phoenix and is a site leader for the Integrative Medicine in Residency program through the University of Arizona Andrew Weil Center for Integrative Medicine. She is a member of the Graduate Medical Education Resident Wellness Committee. She serves as a co-chair for the annual Graduate Medical Education High Value Idea Competition which supports collaboration amongst disciplines, focusing on opportunities to improve quality and reduce cost of care.

Dr. Saunders enjoys all aspects of Obstetrical and Gynecological care. She has an interest in integrative health and wellness for the prevention of disease. Her current research projects include mindfulness-based practices for wellness, utilization of telehealth services in the postpartum period, and adverse childhood experiences and their impact on pregnancy related outcomes.

Michael A. Urig, MD  
Vice-Chair, Center Director of Obstetrics and Gynecology  
Clinical Associate Professor

After graduating from the University of Colorado Medical School, Dr. Urig came to Phoenix where he completed his residency at what was then known as Good Samaritan Medical Center in 1989. Following residency, he joined Maricopa OB/GYN Associates (MOGA) which is one of the primary teaching groups at Banner. He serves as President of Arizona OB/GYN Associates (AOA), the largest group of private practice OB/GYN physicians in the state.

Dr. Urig has been on the teaching faculty in this department for more than 30 years and is currently the associate chair and associate director of the residency program. Dr. Urig is an associate clinical professor at the University of Arizona-College of Medicine, Phoenix. Dr. Urig serves on many hospital committees including serving as chief of service for many years. He is a co-lead on the Clinical Consensus Group for the Banner system and plays an integral role in assuring evidence-based medicine is used to optimize patient care throughout the system.
Following graduation from the University of Rochester, Rochester, New York, Dr. Mourad received his medical degree from the New York College of Osteopathic Medicine. He then completed his residency in Obstetrics and Gynecology at Banner Good Samaritan Medical Center and graduated in 2000. After completion, he joined a prestigious group in the Phoenix area where he practiced for 13 years and held a leadership position.

Dr. Mourad specializes in the treatment of fibroids, endometriosis, heavy periods, cervical incompetence, pelvic pain, ovarian cysts, pelvic prolapse, urinary incontinence, ectopic pregnancy, polyps. It is his passion to provide his patients with the least invasive, yet with the most comprehensive care available.

In collaboration with multiple specialties, Dr. Huls was part of the planning and implementation of the Center of Excellence for Placenta Accreta. The Center was Arizona’s first Center of Excellence accredited by the Arizona Perinatal Trust, which oversees maternal and neonatal services statewide. He lectures to national audiences, researches and publishes on placenta accreta in pregnancy. In 2017 Dr. Huls was named the Maternal-Fetal Medicine Fellowship Director for the University of Arizona at Banner University Medical Center.

For numerous years Dr. Mourad has been recognized as a “Top Doc” by Phoenix Magazine. Over his career he has received various teaching awards including Resident Educator of the Year from the University of Arizona. Dr. Mourad is very active in research projects and has written several publications. He has been invited to speak at numerous national and international presentations.

Dr. Mourad joined the faculty in 2013 as the director of minimally invasive gynecologic surgery and is an associate clinical professor at the University Of Arizona College Of Medicine - Phoenix. Dr. Mourad became the Director of the Fellowship in Minimally Invasive Gynecologic Surgery in 2015.
Laura Mercer, MD
OBGYN Clerkship Director
Intercession Course Director

Dr. Laura Mercer earned her bachelor’s degrees from Northern Arizona University and her medical degree from the University of Arizona. She completed her specialty training in obstetrics and gynecology at Banner - University Medical Center Phoenix.

Dr. Mercer is a clinical assistant professor at The University of Arizona College of Medicine Phoenix and is the Medical Student Clerkship Director for students as they are introduced to the best specialty medicine has to offer. She additionally runs a longitudinal course called Intersessions, which aims to prepare students as well-rounded physicians for residency and beyond. Dr. Mercer’s interests include contraception, adolescent health, minimally invasive surgery, collaborative care and medical student and resident education. She remains actively involved in the American Congress of Obstetricians and Gynecologists (ACOG), where she has served on several section, district and national boards and committees.

Debra Wickman, MD, FACOG, NCMP, CSC
Director of Female Sexual Medicine, Vulvar Medicine and Menopause Health
Assistant Clinical Professor of Obstetrics and Gynecology - University of Arizona College of Medicine

Dr. Debra Wickman earned her medical degree from the University of Washington in Seattle, then stayed to complete her residency training in Obstetrics and Gynecology at the same institution. She went on to obtain fellowship training in female sexual medicine at the University of California, Los Angeles. She was in private practice for more than ten years prior to joining the faculty in 2014.

She brings a unique blend of mind-body medicine to her field of expertise, having also completed certification through AASECT as a sexuality counselor. She is an avid public speaker and workshop leader, having presented for multiple years at the annual meetings of ACOG and AASECT. She has developed her own form of sexological gynecology with the Integrative Pelvic Exam, based on the 4-D Wheel of Sexual Experience, exploring the realms of body/mind/heart/spirit as she helps women navigate the road to sexual wellness and pleasure.

Dr. Wickman’s research interests include improving sexual self-esteem, helping women connect with sexual function and pleasure, restoring vaginal health in the face of chronic vaginitis or vestibulodynia; and resolving sexual pain. This year she has achieved the goal of opening a freestanding center for sexual health, through the Women’s Institute to focus on developing sexual health programs, research in sexual medicine, education for the community, and cutting edge training for the residency program.
After attending Stanford University and receiving his Master's and Bachelor of Science in Biology and Medical Microbiology with honors and distinction, Dr. Laband obtained his MD at the Icahn School of Medicine at Mount Sinai in New York City. From there, he relocated to Phoenix where he has been part of the BUMCP family for over thirty years.

In addition to serving on various committees, his duties include Clinical Assistant Professor, Associate Director, and Section Head of the Gynecology Division.

Steven J Laband, MD, MS
Head, Clinical Gynecology
Clinical Assistant Professor

Dr. Nichole Mahnert received her bachelor’s degree in nutrition and Spanish from the University of Arizona. She then attended the University of Wisconsin School of Medicine and Public Health for medical school. She took one year to pursue the Doris Duke clinical research fellowship at University of Texas Southwestern in Dallas. Following graduation from medical school she went on to Obstetrics and Gynecology residency at Kaiser Permanente Santa Clara in Northern California. After working as a generalist for two years in Shanghai, China she returned to the United States to complete a fellowship in Minimally Invasive Gynecologic Surgery (MIGS) and Chronic Pelvic Pain at the University of Michigan. She worked in California before returning to her home in Phoenix to take a position at Banner – University Medical Center as a Clinical Assistant Professor in Obstetrics and Gynecology and the MIGS Fellowship co-director. She is involved in resident gynecologic surgery and simulation education and directs the resident research program.

Dr. Mahnert’s areas of specialty lie in minimally invasive gynecologic surgery including laparoscopy, vaginal surgery and hysteroscopy. She has special interests in fibroids, abnormal bleeding, pelvic pain and endometriosis. Her current research projects encompass reproductive tract and gut microbiome in relation to gynecologic conditions, peri-operative pain control, chronic pelvic pain and endometriosis diagnosis and treatments, surgical quality and safety, health care disparities in obstetrics and gynecology, and advocacy for women and diversity in medicine.

Nichole Mahnert, MD
Clinical Assistant Professor
The Women’s Health Institute takes a unique approach to women's health by combining academic training for obstetrics and gynecology residents and fellows with experienced board-certified faculty physicians. This allows the practice to provide advanced care for complicated women’s health issues as well as routine exams.

Our Women’s Health Institute is a key resource in central Phoenix because Banner - University Medical Center Phoenix is the primary referral site for high-risk and complicated women’s services. The Institute has accomplished surgeons to perform the most complex surgeries as well as routine well woman care.

**Women’s Institute Locations**

1441 N. 12th St.  
Phoenix, AZ 85006

15810 S. 45th St., Ste. 105  
Phoenix, AZ 85048

7555 E. Osborn Rd.  
Scottsdale, AZ 85251

**Schedule an appointment at all three locations:**

602.521.5700

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**The Women’s Institute Faculty 2020 (L to R):**  
Rachael Smith, D.O., Candice Wood, M.D., Megan Cheney, M.D., Nichole Mahnert, M.D., Jennifer Muff, F.N.P., Debra Wickman, M.D., Jamal Mourad, D.O.
Women’s Sexual Health

The Sexual Medicine Program operates within the Women’s Institute as a unique and innovative resource for women throughout the greater Phoenix area, and beyond. It is the only practice in Arizona dedicated to sexual health for women, and has launched new integrative programs to address both mind and body concepts that are crucial toward improving and resolving the sexual concerns of women. Aligned with that goal, we offer complete evaluation and care for all hormonal treatment options and diagnosis and treatment of all vulvar and vaginal pain disorders. Because sexual concerns are often linked with other medical conditions or medication side effects, we collaborate with primary care physicians or appropriate providers in other disciplines to provide a safe and well-managed plan of care for each woman.

The Sexual Medicine Program specializes in:

Comprehensive diagnosis and treatment of women’s sexual concerns
- Low libido/desire
- Diminished arousal
- Difficult or absent orgasm
- Sexual pain
- Sexual trauma

Diagnosis, treatment and long-term care of vulvar disorders
- Vaginismus and disorders of vaginal penetration
- Vaginal stenosis/narrowing
- Vulvar vestibulitis
- Inflammatory vulvar disorders -Lichen Sclerosus, Lichen Planus, Lichen Simplex Chronicus, etc.
- Sexual and body image effects from cancer treatment
- Chronic vulvar irritation, vaginal infections
- Sexual effects from associated medical illnesses, surgery or medications
- Menopause and all options regarding hormone therapy
  - Bioidentical hormone pellets
  - Vaginal laser treatment (Femilift) to treat vaginal atrophy
  - Platelet Rich Plasma (PRP) genital injections (O-Shot)

Sexuality counseling related to body image, sexual trauma, cancer treatment, and/or any sexual concerns
- Premarital empowerment program – sexuality education and counseling session to educate and promote healthy self-image and relationship
- Close collaboration with community sex therapists and psychotherapists to provide holistic care to their clients

We regularly conduct community workshops dealing with sexual health, as well as professional trainings for the medical community. Research projects in women’s sexual medicine have resulted in presentations in international meetings – The World Congress of Sexual Medicine in Beijing, China; The World Association of Sexual Health in Prague, Czech Republic; and annual clinical/scientific meetings of American professional societies such as ACOG and AASECT.

We completed a sponsored research project investigating the role of a pelvic floor training device in resolving urinary incontinence and improving sexual satisfaction for women. Through collaborations with the University of Arizona, we are currently conducting research to define the vaginal microbiome in women who use alternative types of pelvic floor strengthening, such as the jade egg – thus addressing current topics of public interest as well as furthering scientific knowledge in Women's Health.

Our unique model of diagnosis and treatment incorporates programs that educate, empower and encourage personal growth, sexual discovery and healing for women. The Program looks beyond a singular medical, pharmaceutical or behavioral therapy, and instead integrates all approaches from a mind body perspective.
Reproductive Endocrinology and Infertility

Banner - University Medical Center Phoenix provides compassionate, comprehensive, individualized care for women with a variety of infertility and reproductive endocrine conditions. These include:

- Unexplained infertility
- Male factor infertility
- Fallopian tube disease
- Uterine disease
- Amenorrhea
- Polycystic ovarian disease
- Ovulatory disorders
- Recurrent pregnancy loss
- Endometriosis
- Diminished ovarian reserve
- Advanced maternal age
- Complicated menopausal syndromes
- Recessive genetic disorders
- Galactorrhea

Our treatment programs include:

- Ovulation induction
- Superovulation and insemination
- State-of-the-art In-Vitro Fertilization (IVF)
- Laser-assisted pre-implantation genetic screening
- Assisted hatching
- Fertility preservation
- Egg and blastocyst vitrification
- Embryo banking
- Fresh donor egg services
- Frozen donor egg services
- Embryo donation
- Gestational carrier
- Hormonal therapy
- Minimally invasive surgery

Our physicians are all fellowship-trained, board certified and have over 20 years of experience. They are not only leaders in their field but have led the implementation of procedures to make each patient’s experience safe and reduce the risk of multiple pregnancies.
Department of Obstetrics & Gynecology

Our Commitment to Excellence
Our Minimally Invasive Gynecologic Surgery Program offers a number of advantages:

- Delivery of exceptional care
- Outpatient clinic conveniently located on the Banner – University Medical Center campus
- The expertise of locally and nationally renowned medical and surgical leaders in all specialties
- Multi-disciplinary care at every level

- State-of-the-art equipment: hysteroscopy, laparoscopy, and robotics
- A robust vaginal surgery program
- Collaboration with Women’s Sexual Medicine
- High volume experience with complex procedures
Department of Obstetrics & Gynecology

2019
Hysterectomies performed: 897
Minimally invasive approach: 803 (90%)
Laparotomy approach: 94 (10%)

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<tr>
<td>Total Number of Hysterectomies</td>
<td>897(100)</td>
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<tr>
<td>Abdominal Hysterectomy</td>
<td>94 (10)</td>
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<tr>
<td>Vaginal Hysterectomy</td>
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<td>Laparoscopic Hysterectomy</td>
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<td>Robotic Hysterectomy</td>
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The Women's Institute - 2019
Hysterectomies performed: 187

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<td>TAH</td>
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<tr>
<td>TVH</td>
<td>2%</td>
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<td>TLH</td>
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<tbody>
<tr>
<td>MIS</td>
<td>90%</td>
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<tr>
<td>Laparotomy</td>
<td>10%</td>
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Obstetrics

Our inpatient obstetrical unit provides 28 Labor and Delivery Rooms (LDR’s). Each LDR is designed for the spectrum of natural, unmedicated labor in a family-oriented environment, to the high-risk ICU level care for complicated labor and delivery. Over 5,000 deliveries are performed each year in our unit. A supportive environment is provided for our patients who desire minimal intervention, active movement during labor, minimal monitoring, and the option for labor tubs. Skin-to-skin bonding is emphasized in all deliveries, even cesarean sections, immediately after delivery with “the golden hour” and is considered very important for initiation of bonding and breastfeeding. Midwifery has been instituted and plans are in place for the growth of the midwifery practice in the department. We have instituted the use of nitrous oxide as an added option for pain relief during labor. There are four obstetrical surgical suites on the unit, including one dedicated to multiple gestations. One surgical suite and its anteroom have been made a negative pressure OR for COVID-19 patients and patients under investigation.

Banner - University Medical Center Phoenix has implemented policies and processes to verify that all deliveries prior to 39 weeks gestation are medically indicated utilizing the most current national guidelines. We also have been at the forefront of utilizing evidenced-based outpatient cervical ripening protocols. Outpatient cervical ripening lowers the risk of labor interventions, cesarean section, and complications while also improving patient satisfaction, resource utilization, and reducing costs. We recently expanded our recommendation for outpatient cervical ripening to include all deliveries at 39 weeks gestation and beyond who do not meet established medical criteria for inpatient induction.

The development of an Obstetrical Rapid Response team comprised of nurses, resident physicians, anesthesiologists, obstetricians, and maternal fetal medicine specialists has allowed us to respond to emergencies anywhere in the hospital. Twenty-four-hour in-house anesthesia, maternal fetal specialists, neonatal specialists, and obstetricians allow us to respond to all of the needs of our patients at all times.

Indicators such as elective delivery before 39 weeks, length of stay, readmissions, incidence of postpartum hemorrhage, percent-age of patients threatening delivery before 34 weeks who receive steroids, and breast-feeding success are just some of the indicators that are evaluated on a regular basis to maximize safety, insure excellent outcomes, and provide better quality care.
High-Risk Pregnancy

The Division of Maternal Fetal Medicine (MFM) at Banner - University Medical Center Phoenix is dedicated to providing the utmost in compassionate state-of-the-art medical care to women with high-risk pregnancies.

We treat a wide variety of maternal and fetal conditions at any gestational age which increases risks for adverse outcomes. These include:
- High-order multiples
- Placenta accreta
- Placenta previa
- Pre-term labor
- Premature rupture of membranes
- Maternal cardiac conditions
- Morbid obesity
- Fetal anomalies (such as omphalocele, neural tube defects, and cardiac defects)
- In Utero procedures (Periumbilical Sampling, Intrauterine Transfusion, Shunt Placement)

We accept transports of patients by fixed-wing aircraft or via helicopter from across Arizona to receive their care at Banner – University Medical Center Phoenix.

Substance Use Disorder in Pregnancy

Banner - University Medical Center Phoenix OB department is proud to announce a new Substance Use Disorder in Pregnancy Program. Our large interdisciplinary team, led by addiction medicine, toxicology, maternal fetal medicine, and neonatology experts, has been working for over a year to establish a program focuses on comprehensive care of pregnant women with Substance Use Disorder. Collaborative patient care is provided in the outpatient setting at our Women’s Health and Family Medicine Institutes, as well as inpatient in our obstetric units. Social work and case management teams are instrumental in connecting patients with the individual resources they need. The Neonatal Abstinence Syndrome (NAS) program cares for infants after delivery in both our Neonatal Intensive Care Unit and newborn nursery. Some select newborns and their families have even been able to be discharged to an outpatient NAS treatment program successfully minimizing the time in the hospital.
Obesity

Maternal obesity has been increasingly recognized as significantly associated with adverse pregnancy outcomes. In fact, all adverse perinatal morbidities have been found to occur more often in the setting of maternal obesity. This modifiable risk factor has been looked at as a potential reason that we have sadly seen a rising maternal mortality rate in the United States over the past several decades.

As it is also well described that increasing degrees of obesity impart higher perinatal risks, the Department of Obstetrics and Gynecology Division of Maternal Fetal Medicine (MFM) at Banner - University Medical Center Phoenix has developed a multidisciplinary comprehensive care team-approach program for providing specialized care of the obese gravida, with particular focus on women with Class III obesity; BMI >40. Incorporating MFM physicians, neonatology, anesthesiology, bariatric and trauma surgical consultants, dedicated nursing staff, nutritionists and social services, in addition to the utilization of specialized equipment most suitable to the obese gravida designed to enhance patient safety, our aim is to achieve the highest level of care possible for these at-risk women.

Post-delivery, continuity of care with our bariatric providers allows for an ongoing approach to maximizing health through the opportunity for weight loss using medically supervised non-surgical as well as minimally invasive bariatric surgery options.

High Body Mass Index (BMI) in Pregnancy

Obesity in pregnancy increases the risk of maternal and fetal complications. With number of childbearing age women who are obese rising, Banner - University Medical Center Phoenix recognizes the community need to provide specialized care for these families. In 2019, we developed a standardized interdisciplinary team approach to care for patients with a High BMI in Pregnancy (Pre-pregnancy BMI ≥40). This program combines our Women’s Institute’s expert high risk obstetric and neonatal care with the expert medical and surgical care of obese patients with our Bariatric Center. The team includes experts from obstetrics, maternal fetal medicine, trauma surgery, bariatric surgery, anesthesiology, neonatology, as well as nursing, nutrition, social work/case management, among others. Our experienced doctors and nurses provide personalized care for each family and are trained in any complications that may arise during pregnancy or delivery. We have specialized equipment utilized for patients with a high BMI. This coordinated approach throughout pregnancy and delivery helps to improve outcomes for both the mother and the newborn. After delivery, our bariatric providers are available to discuss any weight loss goals and resources including our weight loss program that includes both medically supervised non-surgical and minimally invasive bariatric surgery programs.
Pregnancy and Cardiovascular Disease

The Department of Obstetrics and Gynecology works closely in collaboration with the Division of Cardiology in identifying women at risk for heart disease. There are traditional risk factors that put women at risk for cardiovascular disease, but there is more research being done identifying sex-specific risk factors, particularly risk factors that appear during pregnancy, that uniquely identify women at a higher risk of cardiovascular disease within the following 10 years. Together we are identifying women at risk and with a team approach, we are assessing risk and working with our women patients to help them reduce their future risk of heart disease and stroke. Our approach to the life-long care of women is a unique collaboration of the Women's Institute and the Heart Institute.

This Women’s Institute and the Heart Institute is the only women's heart center in the city of Phoenix and in the state of Arizona. She is recognized as an international expert in the prevention of cardiovascular disease in women, with a focus on female-specific risk factors for heart disease, with an emphasis on adverse pregnancy outcomes. Identification of women at risk at the earliest stages gives us the greatest opportunity for intervention and the ability to change the trajectory of future risk for cardiovascular disease.

Enhanced Recovery After Cesarean Section

Enhanced Recovery After Surgery (ERAS®) is a multimodal evidenced based perioperative care pathway that is shown to decrease hospital length of stay, improve recovery time, improve patient outcomes, and increased patient satisfaction. ERAS pathways are used in multiple specialties and focus on a patient partnership that views the surgical experience from the prehospital visit through the postop recovery. At Banner - University Medical Center Phoenix, a multidisciplinary team including Nursing, Physicians, Anesthesia, Nutrition, and Pharmacy have come together to develop an Enhanced Recovery After Cesarean Section (ERACS) pathway specific for obstetrical patients. Evidence based components of the ERACS pathway focus on pain management, early ambulation, nausea and vomiting prevention, nutrition, infection prevention, and risk assessment. Positive outcomes seen with the initial cesarean pathway included decreased hospital length of stay, decrease postpartum opioid and antiemetic use, and patient satisfaction. BUMCP now utilizes ERACS for all cesarean section surgeries. Recently, we have partnered with the Women's Health Clinical Consensus Group to implement the ERACS pathway for the Banner Health. ERACS displays innovation in obstetric care at Banner - University Medical Center Phoenix.
Quality and Patient Safety Unit

The Women’s Institute utilizes a multidisciplinary team model to oversee quality and patient safety outcomes in order to deliver reliable, value-based care. Quality indicators are identified annually by the leaders of the specialty areas that comprise the Women’s Institute. These areas include OB, NICU, Well Newborn, OB Anesthesia, GYN/GYN Oncology, and The Women’s Center Clinic.

Inpatient indicators such as management of postpartum hemorrhage, safe surgery compliance, infection rates, timeliness of antibiotic administration to infants exposed to chorioamnionitis, frequency of use of general anesthesia for cesarean sections and identified Vermont Oxford indicators are examples of the types of clinical outcomes that are reviewed and trended. Outpatient indicators include depression screening, postpartum follow-up rate, no show rate, and referrals made to other specialties.

Additionally, the Joint Commission’s Perinatal Core Measures, patient satisfaction, length of stay, and the Nursing Sensitive Quality Indicators (CAUTI, CLABSI, falls, etc.) are integrated into our quality monitoring model. Our Specialty Programs (Accreta, Fetal Surgery, Virtual ICU, High BMI, Substance Use Disorder & OB Trauma) also have identified indicators that are reviewed.

Sustained results that consistently meet, or exceed, benchmarks is our consistent focus. Items that are not meeting identified tar-gets are discussed and assigned to defined owners for investigation, correction and monitoring. Our Women’s Institute team connects to the facility’s Quality & Patient Safety Council through a defined reporting structure.
Banner – University Medical Center Phoenix originally opened in 1911 and was then called Arizona Deaconess Hospital. When a new hospital was built in 1923, it had room for 105 patients, five operating rooms and a special obstetrical delivery unit and Arizona’s first incubator. The hospital has always been a leader in obstetrics, and in the 1960s opened a neonatal intensive care unit and hired the state’s first neonatologist to care for premature babies. When the NICU opened in 1964, Arizona went from 40th in infant mortality to fifth within 10 years. The hospital already had been well-known for its promoting mother-baby bonding, a practice it had been following since the 1940s. Banner - University Medical Center Phoenix has delivered more high order multiples – triplets, quadruplets, and quintuplets – than any other facility in the world and in 2007 sextuplets were delivered here. The six babies and mom did fine.

Today the hospital’s Labor and Delivery and ultrasound departments use state-of-the-art equipment and software to ensure patients receive the most recent innovative technology. Services range from basic fetal testing to complex therapeutic procedures, including identifying if fetal surgery needs to be performed fetal surgery while the baby is still in the womb. Banner - University Medical Center Phoenix also provides comprehensive care to the families of developing babies diagnosed with a congenital defect.

Banner - University Medical Center Phoenix is certified as a Level III Perinatal/Neonatal Center by the Arizona Perinatal Trust, which allows the hospital to care for patients with obstetrical/neonatal medical conditions at different stages of pregnancy and early neonatal gestation. The Banner - University Medical Center Phoenix NICU provides comprehensive care some of the most premature and vulnerable newborns with emphasis on family centered care; in addition, it offers state of the art programs such as retinal camera exams for eye disease in premature infants; and whole body hypothermia therapy. It offers the very best in education and support. The Banner - University Medical Center Phoenix NICU is also an active center of nursing education, training tomorrow’s medical and nursing providers. Additionally, Banner - University Medical Center Phoenix is active in NICU research participating in and creating multiple trials both in Arizona and across the United States. The NICU has a robust Continuous Quality Improvement program with a goal to provide evidence-based care.

Neonatal Intensive Care Unit
Gynecology

The Division of Gynecology at Banner – University Medical Center Phoenix involves outpatient and inpatient management encompassing the spectrum of Women’s Health issues. Management opportunities include:

- Well Woman Visits
- Menstrual abnormalities
  - Anovulation and infrequent periods
  - Heavy periods
  - Hormonal treatment
  - In Office endometrial ablation
- Infertility evaluation and treatment
- Abnormal pap smears and cervical dysplasia
  - Colposcopy
  - Chemical ablative and excisional procedures
- Contraception and family planning
  - Hormonal contraception
    - Birth control pills
    - Contraceptive ring
    - Depoprovera
    - Birth control patch
  - Long-acting reversible contraception
    - Hormonal IUD
    - Copper IUD
    - Hormonal implants
    - Permanent contraception
- Polycystic ovarian syndrome
- Pelvic pain
- Endometriosis
- Menopause management
- Postmenopausal bleeding
- Gynecological ultrasound
- Ovarian cysts
Gynecology (Cont.)

Uterine fibroids: medical management and surgical management including:
  • Hysteroscopic resection
  • Fibroid removal (myomectomy)
  • Hysterectomy
    – Endometrial ablation
    – Medical management

A variety of surgical approaches for diagnosis and treatment of various conditions
  • Vaginal
  • Laparoscopic
  • Robotic
    – Mini laparotomy
    – Laparotomy

Ongoing development involves integrative gynecology and a surgical gynecology consensus group to determine the best surgical route for each individual patient. We work closely with other specialists when a patient’s disease process requires expertise outside of our scope.
The Division of Gynecologic Oncology at Banner - University Medical Center Phoenix is dedicated to helping women with the diagnosis and treatment of reproductive tract malignancies, pre-malignancies or suspected malignancies. These include:

- Endometrial Cancer
- Ovarian Cancer
- Cervical Cancer
- Vulvar and Vaginal Cancer
- Gestational Trophoblastic Disease

**OUR MISSION** is to provide comprehensive and multidisciplinary care resulting in the most up to date and innovative treatment for these conditions. Special attention is made to provide a caring and supportive environment by using a dedicated unit that uses expertise in nursing care, oncology pharmacists/case managers, nutrition specialists, genetic counselors and gynecologic oncologists.

Our GYN oncology services include:

- Minimally invasive and robotic surgical teams
- Cancer genetics program
- Direct access to national clinical trials research
- Inpatient and outpatient surgery
- Chemotherapy and radiation oncology
- Integrated care with palliative care services

Special Features of the GYN oncology division:

- Manage complex cases from throughout AZ
- Dedicated women's specialty service
- Expertise in surgical management for abnormal placentation (Placenta Accreta Program)
- Educate 36 OB/GYN resident physicians per year in GYN Oncology and complex Gynecologic Surgical Care
- Cancer screening and prevention program with community outreach
- BUMCP partnership with Arizona Oncology to promote teaching, research and service
- Faculty appointments at University of Arizona College of Medicine
- Regional leader in gynecologic oncology
- Principle investigators in research involving:
  - PARP inhibitors
  - Immune Therapy
  - DNA vaccine therapy for cervix cancer
Nursing

Banner – University Medical Center Phoenix holds the recognition of being designated as a Magnet Facility, a prestigious status awarded to health care organizations in recognition of nursing excellence. Banner - University Medical Center Phoenix has been awarded this distinction since June 2005 by the American Nurses Credentialing Center. Magnet certification is based on provision of a cultural foundation focused on nurses’ involvement and decision-making to deliver quality and safe nursing care to achieve positive patient outcomes. We promote nurses’ professional growth, enlist enthusiasm for evidence-based care and process improvement, and enhance collegial relationships between all team members. Approximately 9% of all hospitals nationwide have attained Magnet status.

Banner - University Medical Center Phoenix is certified by the Arizona Perinatal Trust (APT) as a Level 3 Perinatal facility, which recognizes our ability to provide care for pregnancies of all gestational ages. Whether low-risk or high-risk, we recognize that every birth is a unique experience and work to provide that special memory for patients and families through comprehensive specialty care, family education and support. In 2016, we were also awarded Specialized Service recognition for our high-risk Accreta program, which is currently the only such program in Arizona. Banner - University Medical Center Phoenix perinatal nurses and physicians had recognized the community need and worked together to create and implement a comprehensive interdisciplinary program that is providing excellent outcomes.

Our Women’s Institute Inpatient service consists of OB Triage, Labor and Delivery, Antepartum, Postpartum/Nursery, NICU, and GYN oncology units. Within this diversity of clinical subspecialties, there is concentrated emphasis on collaborative communication, continual learning, evidence-based practice & research. Being a recipient of the IBCLC Care Award, a global recognition for lactation support, is one example of this synergy. Our interdisciplinary team includes RNs, patient care assistants, surgical techs, lactation consultants, educators, clinical nurse specialists, and unit leaders. Many of our nurses have achieved additional certification in their specialty, have advanced in the Clinical Ladder program, participated in numerous evidence-based practices and research. In collaboration with physicians, our nurses also deliver needed specialty care to pregnant patients housed outside of the perinatal service through provision of a co-management care model.

Our Women’s Institute Outpatient service is elevating the standard of care for women in Arizona and beyond with a delivery model that promotes collaboration through a interdisciplinary approach to care. Its services span everything from routine obstetrics and gynecology, to the more complex maternal-fetal medicine, breast health, diseases of the female reproductive system, menopause management, pelvic pain, sexual health, and more. Physicians, nurse practitioners, medical assistants, schedulers, office staff, and practice leaders comprise the healthcare team. Increased collaboration between the inpatient and outpatient services continues to occur in order to provide seamless care delivery to patients.

Our work environment is one that is built on collaboration, learning and mutual respect. Teamwork among nursing, resident physicians, attending physicians, outpatient and ancillary departments is the basis for our care delivery model.

For all our patients, we are dedicated to provide quality, individualized, holistic nursing care in a compassionate, family-centered environment.
Female Pelvic Medicine and Reconstructive Surgery

The Division of Female Pelvic Medicine and Reconstructive Surgery at Banner - University Medical Center Phoenix consists of double-boarded fellowship trained physicians who are experts in the care of women with advanced pelvic floor disorders. They treat several common conditions such as:

- Moderate to severe pelvic organ prolapse
- Urinary incontinence
- Fecal incontinence
- Overactive bladder
- Genitourinary fistulas
- Bladder pain syndrome
- Defecatory dysfunction
- Urethral diverticula
- Genitourinary syndrome
- Recurrent cystitis
- Genitourinary mesh implant complications
- Perineal and anal sphincter injury due to obstetric complications

Patients have the opportunity to have a consultation to discuss all options for management including conservative and surgical measures and in office therapy.

- Mesh revision and removal
- Rectovaginal fistula repair
- Vescovaginal fistula repair
- Urethral diverticulectomy
- Thermal radiofrequency treatment of vagina for atrophy (ThermiVA)
- Minimally invasive surgery for pelvic organ prolapse
- Sacrospinous ligament suspension
- Uterosacral ligament suspension
- Robotic laparoscopic abdominal sacral colpopexy.

We offer multiple advanced therapies for overactive bladder:

- PTNS (Peripheral Tibial Nerve Stimulation)
- Sacral neuromodulation (Interstim)
- Pelvic floor muscle therapy
- Intravesicular Botox injections
- Participation in FDA Trials

Chronic Pelvic Pain and Endometriosis Clinic

We have created a comprehensive chronic pelvic pain and endometriosis clinic to care for the complex needs women encounter in the diagnosis and treatment for these associated conditions. Our clinic offers compassionate, quality care and incorporates a holistic approach. Within our office we offer a seamless diagnostic approach with advanced pelvic ultrasound capabilities. We collaborate with our key partners including gastroenterology, urology, radiology, physical therapy, nutrition and psychiatry. Additionally, we are also building relationships with acupuncturists and Chinese medicine practitioners. We provide a balance of medical and surgical treatments to meet the diverse needs of our patients.
OBGYN Residency Program

Our Program
• Nine residents each year
• No night float; specialized night rotation for interns
• Night call at only one hospital
• Traditional 24-hour call schedule years two through four

Teaching & Education
• Clinical clerkship site for University of Arizona
• State-of-the-art simulation education and training at SimET Center with DaVinci trainer at Banner University Medical Center Phoenix
• Dual-console DaVinci robots in operating rooms
• Daily protected educational lectures with catered lunch
• Consistently at or above 50th percentile nationally for operative numbers

Benefits
• Salary stratified by year of experience: Residency $57,000 - $65,000, Fellowship $68,000 - $79,000
• Third-year and fourth-year elective time
• Daily catered lunch with additional meal card allowance
• Four weeks of paid vacation annually, with additional days off for holidays and discretionary days
• Free health insurance for residents and their families
• Annual resident retreat
• Specialized OB/GYN resident call rooms adjacent to L&D
• Moonlighting permitted for qualified upper-level residents
• Financial assistance with board and USMLE costs
• Financial assistance for global health opportunities

Patient Population
• 5,500 deliveries per year
• Widely diverse patient population
• Central tertiary care center with large referral area
• Work side-by-side with other residency programs including: General Surgery, Orthopedic Surgery, Psychiatry, Internal Medicine, Med/Peds, Family Medicine, Emergency Medicine and fellows across many specialties

Research
• Supported research by faculty mentors in field of resident’s choice
• Faculty assistance with statistical analysis
• Funding provided for traveling to presentations

Beyond Residency
• Demonstrated success in fellowship match across all sub-specialties
• About 50 percent of graduates stay in Arizona to practice
Medical Student Education

Banner - University Medical Center Phoenix is a core clerkship site for The University of Arizona College of Medicine - Phoenix where third year students work with our outstanding faculty and residents during their core clerkship in obstetrics and gynecology and fourth year students return for a variety of electives. We also host students from Midwestern University College of Osteopathic Medicine, AT Still School of Osteopathic Medicine and visiting students from medical schools across the country.

The ongoing innovation at the University of Arizona College of Medicine - Phoenix places an emphasis on adult learning theory with an integration of a multi-disciplinary, team-based care in an evolving health care system. No longer do students sit through “lectures”... instead, they are engaged in hands-on problem solving based on real and simulated patient experiences. Through a flipped-classroom model, learners do their reading and preparation before didactic sessions and have access to multimedia resources for self-study. When brought together in teams with faculty mentors, they participate in case-based care and hands-on simulation of obstetric and gynecologic clinical experiences. This approach augments a robust exposure to the field of obstetrics and gynecology through participation in patient care at Banner - University Medical Center Phoenix and has become increasingly important amid adaptations to COVID - 19.
Maternal Fetal Medicine Fellowship

The Maternal Fetal Medicine (MFM) fellowship at Banner - University Medical Center Phoenix is the first MFM subspecialty program for Banner, the city of Phoenix and the University of Arizona in Phoenix. The training program compliments and elevates the current residency training program at the hospital. This is a three year specialized training program for the care of complicated pregnancies, research methodology, education, and teaching. The mission of the fellowship is to provide clinical focus, stimulating research, develop master teachers, develop compassionate communicators, leadership in self and others, and to develop versatility and special interests for the fellow.

The fellowship takes one fellow per year and provides them with an 18-24 month of clinical experience plus 12-18 months of research. The core clinical rotations include Labor and Delivery, High-Risk antepartum, Adult ICU, Neonatal ICU, ultrasound imaging, outpatient MFM and genetics. Additional rotations for our program are Neonatal ICU and simulation, and electives available in pediatric cardiology and family planning. The fellows will pursue additional clinical experience based on their interests, research, and career development. Each fellow is paired with a faculty research mentor who helps in developing hypothesis-based research questions, methodology to answer questions and to create projects to test that hypothesis.

During their training, fellows are exposed to and perform advanced procedures. These include amniocentesis, chorionic villous sampling, percutaneous umbilical cord sampling, and intrauterine transfusions. Fellows are exposed to fetal interventional procedures such as bladder shunt and chest tube placement, radio frequency cord ablation, and ex-utero intrapartum therapy (EXIT) procedures. Additional time is spent within the Center of Excellence for Placenta Accreta taking care of abnormally invasive placentation with specialists from interventional radiology, trauma surgery, anesthetia, and gynecology-oncology. These specialized procedures enhance the fellow’s ability to collaborate with multiple specialties and engage change in a large health care system.

There are several unique aspects of our MFM fellowship program. The fellow spends a one month elective creating and utilizing OB simulation with the Banner Simulation Center in Mesa AZ. There are several national conferences that the fellow will participate in here in Phoenix including the Society of Maternal Fetal Medicine’s Obstetric Critical Care course in the fall and the Obstetrical Challenges Conference during the spring each year. Lastly, fellows receive additional training, mentoring and coaching in leadership with Dr. Michael Foley and the Society of Maternal-Fetal Medicine’s Leadership Academy.

Women and Infant Service Interdisciplinary Care Conferences

In our commitment to provide exceptional, leading care of high-risk pregnancies, Banner University Medical Center Phoenix has established an Interdisciplinary Care Conference program. Patient care conferences are performed bimonthly, or more often if needed, discuss complex maternal cases that require advanced interdisciplinary services. Medical conditions include maternal heart conditions, pulmonary hypertension, cancer, neurosurgery, kidney/liver disease, and other medical or surgical complications. Team members include MFM & MFM Fellows, OB/GYN & OB/GYN Residents, OB Anesthesia, Intensive Care, Cardiology, Neonatology, cross departmental nursing leadership, bedside nursing, and other specialties as needed. Team members review the patient’s history, diagnosis, and determine a plan of care for pregnancy and delivery. The care conference not only bridge care between specialties, but also the inpatient and outpatient settings. Care plans are then developed that assist team members with care coordination and communication, ultimately improving patient care and outcomes.
Minimally Invasive Gynecologic Surgery

Division of Minimally Invasive Gynecologic Surgery
At The Women’s Institute, we strive to provide and deliver exceptional care in the least invasive approach. While offering state-of-the-art, safe and compassionate treatment plans, we continuously track our patients’ data and results so that we can understand what measures, procedures and treatments offer the best possible outcomes.

Our patients can expect a caring and welcoming environment where academia and clinical medicine come together to deliver the highest possible quality care.

Clinical Services

Office Procedures
- Endometrial Ablation
- Hysteroscopy
- Cystoscopy
- Colposcopy
- IUD Insertion and removal
- Hymenectomy
- D&C
- Pelvic Floor Botox
- Pudendal Nerve Block
- LEEP

Minimally Invasive Surgery
- Hysterectomy
  - Vaginal
  - Laparoscopic
  - Robotic
  - Mini laparotomy
- Ovarian cystectomy
- Endometriosis, DIE
- Robotic and Laparoscopic Myomectomy
- Adenomyosis
- Repair of pelvic prolapse, sacrocolpopexy
- Incontinence treatment, Laparoscopic Burch Procedure
- Ectopic Pregnancy
- Uterine Niche/C-section scar Deffect Repair

Medical Treatment
- Hormone replacement
  - Pellets
  - Bio-identical hormones
- Couples therapy

2019
Hysterectomies performed for benign disease: 897
Laparotomy approach: 11%
Minimally invasive approach: 89%

<table>
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<th>GYN Procedures 2019</th>
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The Banner - University Medical Center Phoenix MIGS Fellowship Program is a comprehensive two year program designed to advance the fellow's surgical skills and confidence level in multiple areas of surgical gynecology. Our full academic integration with the University of Arizona College of Medicine allows for ample research, academic and didactic opportunities to enhance the fellow's learning and training experience.

Our comprehensive curriculum encompasses all facets of MIGS, including vaginal hysterectomy, hysteroscopic procedures, in-office endometrial ablation and tubal occlusion procedures, laparoscopy and robotics. Our diverse core faculty includes surgeons from several specialties allowing for exposure to a variety of different procedures and techniques to maximize the fellow's surgical repertoire. During the two-year program, the fellows rotate through the general gynecology service, general surgery, colorectal surgery, urology, female pelvic medicine reconstruction surgery and gynecology-oncology. At the end of their training program, fellows have the ability to function as independent gynecologic surgical consultants.

Fellows actively participate in teaching of OB/GYN residents and medical students. The fellows present a Grand Rounds topic related to MIGS twice a year and conduct daily morning GYN Rounds with the residents.

Our unique, state-of-the-art Banner Simulation Center offers our fellows a unique opportunity for surgical simulation training, allowing 24/7 access to hysteroscopic, laparoscopic and robotic skills set training. We are the only simulation program in the world that is accredited as an entire system. As such, each fellow is expected to present every year at the national level with the intention of submitting a manuscript for a peer review publication.

We also offer a Master of Science (MS) degree in CTS from the University of Arizona. The Clinical Translational Sciences (CTS) Graduate Program is designed to provide a strong foundation in clinical translational sciences for post baccalaureate and postgraduate candidates. The mission of the Master’s Program is to provide an avenue for the fellow to gain more experience in and exposure to the diverse areas of the clinical translational science and to offer a mechanism to obtain in-depth knowledge in a specific area of biomedical research. To this end, fellows participate in a specific laboratory or clinical research project working with a CTS faculty mentor.

MIGS core faculty are:
Dr. Jamal Mourad, Director;
Dr. Nichole Mahnert, Assistant Director,
Dr. Kelly Roy, Assistant Director.
The Integrative Medicine in Residency (IMR) program is a competency-based, interactive, online curriculum in integrative medicine designed for incorporation into residency education through the University of Arizona Andrew Weil Center for Integrative Medicine. It is currently used in family medicine, internal medicine, pediatrics, and psychiatry residencies across the country. The University of Arizona College of Medicine - Phoenix is the first and only OB/GYN residency program to implement this curriculum for select interested residents in their 2nd, 3rd, or 4th year of training. We are currently in our 6th year of participation in the IMR program with dedicated faculty to facilitate resident completion over the course of an academic year. Residents learn integrative approaches to common conditions in women’s healthcare. The innovative online curriculum covers evidence-based topics in nutrition, exercise, pain management, vitamins, minerals, supplements, mind-body techniques and more. It has a strong focus on physician wellbeing and encourages multidisciplinary collaboration. Upon completion, residents have a broader understanding of complementary and alternative treatments with an enhanced focus on the therapeutic relationship between women's healthcare practitioners and their patients.
Specialty Programs

Placenta Accreta
With a commitment to excellence in the care of patients with abnormal placentation, Banner - University Medical Center Phoenix developed a multidisciplinary approach utilizing a team of highly-skilled specialists. Our comprehensive care management program addresses patient and family needs throughout the pregnancy, at the time of delivery, and postpartum.

An individualized plan of care is created for each mom-to-be by a team of experts in maternal fetal medicine, trauma surgery, gynecological oncology, anesthesiology, interventional radiology, urology, neonatology, nursing, social work and case management. Additionally, the hospital’s laboratory and blood bank are readily mobilized so the patient benefits from having a coordinated approach to care.

Our experienced doctors and nurses are prepared to care for these highly complex pregnancies and deliveries, and for any emergencies that may arise. Patients have the knowledge and peace of mind that Banner - University Medical Center Phoenix has the resources to promptly assemble highly skilled specialists from multiple disciplines should the need arise.

Virtual ICU
The following abstract summarizes a Viewpoint article published in the American Journal of Obstetrics and Gynecology in December 2016 (Leovic M, Starikov R, Robbins H, and Foley M.)

Management of the critically-ill pregnant patient presents a clinical dilemma in which there is sparse objective data to determine the optimal setting for the provision of high quality care to these patients. This clinical scenario will continue to present a challenge for providers as the chronic illness and comorbid conditions continue to become more commonly encountered in the obstetric population. Various care models exist across a broad spectrum of facilities that are characterized by differing levels of resources; however, no studies have identified which model provides the highest level of care and patient safety while maintaining a reasonable degree of cost-effectiveness.

The health care needs of the critically-ill obstetric patient calls for clinicians to move beyond the traditional definition of the “ICU” and develop a well-rounded, quickly-responsive, and communicative interdisciplinary team that can provide high-quality, unique, and versatile care that best meets the needs of each particular patient. We propose a model where a “Virtual ICU” team composed of pre-selected specialists from multiple disciplines (maternal-fetal medicine, neonatology, obstetric anesthesiology, cardiology, pulmonology, etc.) participate in the provision of individualized, pre-contemplated care that is readily adapted to the specific patient’s clinical needs, regardless of setting. With this team-based approach, an environment of trust and familiarity is fostered amongst team members and well-thought-out patient care plans are developed through routine “pre-brief” discussions regarding individual clinical care for parturients anticipated to require critical care services. Incorporating debriefings between team members following these intricate cases will allow for the continued evolution of care as the medical needs of this patient population change as well.
Obstetric Anesthesia

The division of Obstetric Anesthesiology at Banner - University Medical Center Phoenix consists of board certified anesthesiologists who head a team of highly trained medical professionals who bring state-of-the-art anesthesia care to all our obstetric patients. As part of our commitment to the highest level of both high risk and routine obstetric care, we staff the labor and delivery floor 24/7, 365 days a year.

We are the providers of education and training to both anesthesia residents and OB/GYN residents during elective time. We have designed and implemented a core curriculum which combines didactic teaching with supervised hands-on experience.

We are experienced in treating the highest risk, critically ill patients at Banner - University Medical Center Phoenix, and are well versed in life-saving fluid resuscitation, invasive monitoring, advanced airway management as well as complex pain management problems.

The Department of Obstetric Anesthesia works closely and collaboratively with our “virtual” obstetric intensive care team, our simulation department and Banner Health’s Women’s Institute. Team members from Obstetric Anesthesiology regularly participate in multidisciplinary obstetric board checkout rounds to provide insight, teaching and up-to-date consultations.
Banner Health runs one of the largest multidisciplinary simulation education programs in the United States to train physicians, nurses, allied health care professionals and emergency responders to treat a range of patients, from infants to adults. We are transforming health care delivery through simulation, learning, and research across Banner from our four locations in Mesa, Tucson, and Phoenix in Arizona and Loveland in Colorado.

At Banner’s simulation centers, we use mannequins, simulators and virtual-reality programs to train the next generation of health care professionals in an environment that mirrors real-life medical situations. Hundreds of medical students, residents, physicians and nursing staff are educated using simulations each year.

Here at Banner - University Medical Center Phoenix, we moved into a newly built simulation space in May 2019. Our cutting-edge medical mannequins breathe, blink, code, seize, bleed, speak and even give birth, all with programmable complications to simulate potential medical conditions. Participants can practice their response to critical medical emergencies and hone their skills in commonly performed procedures such as inserting chest tubes or central lines.

With this training, health care providers can acquire the skills needed to deliver safer and the highest quality of patient care.

Key Features Offered
- Only testing center in Arizona for Fundamentals of Laparoscopic Surgery and Fundamentals of Endoscopic Surgery testing
- Birthing Suite and other simulation suites
- Operating room
- 24/7 Virtual Reality room for Residents
  - Laparoscopic and Hysteroscopic Trainers
  - OB Ultrasound trainer
  - DaVinci robotic virtual trainer

Simulation Medical Center Staff
Karen Josey, M.Ed. BSN, CHSE
Sr. Director of Simulation – Banner Health

Carrie Brandon, MS, RN
Simulation Director

Kerri Brandon, BSN, RN
Senior Manager

Lorena B. Smith, MSN-L, BSN, RN
Simulation Director
Basic Science Research

Translational Science helps to achieve health care innovation, bridging the gap between patient and biomedical research. Melissa Herbst-Kralovetz, PhD is the Director of the Women’s Health Microbiome Initiative and has brought together OBGYN faculty, multidisciplinary and specialty physicians, other researchers and trainees from across Arizona to study the microbiome and the associated local genital microenvironment and how it impacts women’s gynecologic and obstetric health. The Women’s Health Microbiome Initiative launched in 2017, aims to bring physicians and scientists in vast areas of gynecologic health, fertility, and gynecologic cancer with a high translational value to clinical practice. Through the collection of clinical samples, a collaborative effort with the UAriana, OBGYN Department Residency Program and the clinicians and surgeons at Banner - University Medical Center Phoenix, Dr. Herbst-Kralovetz and her team have collected valuable data to identify microbial communities and inflammatory profiles associated with endometrial cancer. The team’s efforts were presented by Paweł Łaniewski, PhD, Assistant Research Scientist, at the 5th Annual ABRC-Flinn Research Conference on the “Characterization of the genital microbiota in obese and non-obese type I endometrial cancer patients” research study.

A couple of highlights from the Women’s Health Microbiome Initiative this past year, are April 2020 Nature Review Urology, producing a literary review of over 200 publications covering fundamental aspects of the female reproductive tract microbiota and implications for cancer development and treatment. The lab team was also recognized on the March 2020 issue of The Journal of Infectious Disease, with an original article and the Journal cover featuring their scanning electron microscopy (SEM) image of 3-D human cervical cells infected and colonized by bacteria commonly found in women suffering from bacterial vaginosis (BV). The research findings from multiple studies have assisted the Herbst-Kralovetz team with new information to envision further ways to study the microbiome. “I wanted to share this exciting work with a broad audience and encourage others to pursue research on the microbiome and gynecologic cancer to ensure we have high quality and robust findings to support future interventions that aim to modulate the microbiome,” Dr. Herbst-Kralovetz said. “This is a fascinating new area of research. We need more research on this topic and in women’s health in general.”

Review of Women’s Health Advancements: More Research and Funding Needed- March 16, 2020, Teresa Joseph, UA News. Ongoing work includes studying women’s health disparities in minority groups, Native American and Hispanic women, through partnerships and funding with the Native American Cancer Prevention (NACP), the University of Arizona Cancer Center (UACC), Northern Arizona University (NAU), Valleywise Health (formally Maricopa Integrated Health System – MiHS), and multiple community health and wellness clinics in Arizona. In addition, efforts are focused to promote HPV vaccination awareness and cervical cancer screening.

Dr. Herbst-Kralovetz engages with several collegiate and community groups, inspiring fellow female University of Arizona Faculty and community leaders to empower and recognize each other’s success. As a leader in Women in Medicine and Science (WIMS) she promotes the advancement, leadership, and success for women in all roles within academic medicine and science. In the 2019, she gave a presentation on Gender Equity in STEM in a Town Hall in Tucson, AZ sponsored by the National Academy of Sciences, Engineering and Medicine (NASEM). In addition, she recently presented to the Women Inspiring Scientific Progress (WISP) group on the Microbiome and Women’s Health. Dr. Herbst-Kralovetz has had the honor to meet with Governor Doug Ducey’s office to promote biomedical research at the University of Arizona and the BIO5 Institute, and Senator Martha McSally and Mayor Kate Gallego promoting women in medicine in science, gender equality, and NIH support for women’s health research.

Basic Science Core Faculty Team 2019- 2020 (L to R)
Jason Maarsingh, PhD (far left), Pawel Laniewski, PhD, Elisa Martinez, Melissa Herbst-Kralovetz, PhD (center), Mary Salliss (back), Michael Khnanisho and Regina Montero, RN (far right)
Cameroon–Arizona Partnership

The World Health Organization estimates that about 830 women die each day from preventable causes related to pregnancy and childbirth. Nearly 99 percent of all maternal deaths occur in developing countries. Two thirds of these occur in sub-Saharan Africa.

The University of Arizona has partnered with the University of Buea in Cameroon to help address this maternal health disparity. Utilizing a model that has proven successful through the 1000+ OBGYN Project, UA and UBuea faculty have come together to start the first English-speaking OBGYN residency program in Cameroon. Collaborative meetings in both countries over several years have culminated with the signing of the Memorandum of Understanding in 2015 and the approval and support from the Cameroonian Ministry of Higher Education and Ministry of Health in 2016.

Growing political unrest in the region and the COVID-19 pandemic have created new challenges. Virtual education and telementoring are growing efforts. Cameroon–Arizona Partnership remains active in securing resources — financial, educational, people, and material. For more information, please see cameroonarizonapartnership.org and 1000obgyn.org

For more information about Cameroon–Arizona Partnership’s efforts, please visit http://www.cameroonarizonapartnership.org/.
Research and Scholarship

We continue to grow our scholarship efforts and build on our goals to enhance resident and fellow research, and to build our relationship with the University of Arizona, College of Medicine-Phoenix. The caliber of research produced by our residents continues to improve and impress. Part of the success of our program is the collaborative nature of our research team that includes our research nurse coordinator, Regina Montero, MSN, Robert Garfield, PhD, and Melissa Herbst-Kralovetz PhD. We have been fortunate to add Elisa Martinez, MBA, to complement our research team this year. Regina and Elisa assist in coordinating/supporting key aspects of research logistics for our staff and faculty. Dr. Garfield leads obstetric research efforts with novel research in uterine myometrial electrical activity.

Beginning in 2017, we launched an innovative and highly interdisciplinary research initiative with the College of Medicine-Phoenix (COM-PHX) led by Melissa Herbst-Kralovetz, PhD. She is a phenomenal basic science scholar who has a joint appointment in the Departments of Basic Medical Sciences and Obstetrics and Gynecology. Dr. Herbst-Kralovetz directs the Women’s Health Microbiome Initiative for the College of Medicine-Phoenix and in Obstetrics and Gynecology. Her efforts include examining the microbiome of the genital tract in health and disease as it relates to improving women’s health outcomes. In addition, she is integral in building partnerships and new collaborations with fellow OB/GYN faculty, clinics and institutions throughout Arizona.

Scholarship is one of the major components of the Women’s Institute. Under the leadership of Dr. Michael Foley, focused steps have been taken to demonstrate the importance of scholarly activity. There is a broad definition of scholarship which includes but is not limited to research. Designing innovative educational programs, actively participating in educational organizations at a local, regional and national level, quality improvement projects and any contribution to the scientific literature are examples.

We successfully launched our first Annual Fellows Research Day via an electronic platform. This is an example of a collaborative effort to highlight the Fellows’ research from the Obstetrics and Gynecology Minimally Invasive Surgery, Maternal Fetal Medicine and Pediatric/Adolescent Gynecology fellowship programs from around the Phoenix metroplex and Tucson.

The Obstetrics and Gynecology Department physicians and nurses at Banner - University Medical Center Phoenix are actively engaged in scholarship on a local, national, and international level. This includes authoring or editing books and book chapters, independent research or in collaboration with a resident, lecturing at a conference, developing educational materials, writing an article for a peer reviewed journal, etc. Banner - University Medical Center Phoenix takes pride in the recognition of our scholarship and has established ways to fund residents’ travel and provides an annual award given at our House Commencement in June.

Regina Montero, MSN
Clinical Research Nurse Coordinator

Elisa Martinez, MBA
Clinical Research Coordinator

Nichole Mahnert, MD
Director of Research
602.521.5700

Melissa Herbst-Kralovetz, PhD
Director, Women’s Health Microbiome Initiative
602.827.2247

UA/BUMCP Obstetrics and Gynecology
Research Team Mission Statement:

We are committed to provide ongoing support to the Faculty, Fellows, and Residents in their Basic, Clinical and Translational Research endeavors. Our long-term goal is to facilitate the quality of Clinical Research and elevate scholarship production in the Department of Obstetrics and Gynecology.
2020 Graduating Chief Research Projects

Anthony Canestraro, MD  “Nitrous Oxide in Labor”
Angie DeGrio, MD  “Is there a Role for Pneumococcal Vaccines in Prenatal Care?”
Michael Graves, MD  “A review of trends in Cholestasis in pregnancy at BUMCP”
Heather Madden, MD  “Frequency of Proteinurua Testing after the Diagnosis of Preeclampsia.”
Shaida Molloy, MD  “The Power of Yoga: Investigating the feasibility and preliminary effects of yoga on excessive gestational weight gain”
Evan Reshef, MD  “The effect of bilateral tubal ligation and bilateral salpingectomy on future ovarian response during IVF Cycles.”
Jared Sander, MD  “Vacuum Assisted Vaginal Delivery Curriculum to Improve Resident Knowledge Acquisition and Retention”
Molly Soholt, MD  “Implementation of GBS self-swab to improve patient empowerment and satisfaction”
Lindsey Stoycheff, MD  “Baseline Prevalence and Risk Factor for Surgical Site Infections Following Hysterectomy at Multisite Banner Institutions”

OB/GYN Chief Graduating Class of 2020 (L to R)
Doctors Matthew Graves, Molly Gilbert, Anthony Canestraro, Heather Madden, Lindsey Stoycheff, Angie DeGrio, Celeste Potteroff (MOGA Clinical Faculty), Jared Sander, Shaida Molloy, Evan Reshef, and Laurie Erickson (OBGYN Residency Director 2014-July 2020)
Critical Care in Obstetrics - An Innovative and Integrated Model for Learning the Essentials

Banner - University Medical Center Phoenix, the Society for Maternal Fetal Medicine, and the University of Arizona College of Medicine Phoenix are proud to offer the seventh annual hands-on and very popular symposium in Critical Care in Obstetrics.

When: November 11th – 13th, 2021
Where: Scottsdale Resort at McCormick Ranch, Scottsdale, AZ
Host: Michael R Foley, MD

This innovative and integrated program will address essential learning in the discipline of critical care obstetrics. Integrating pre-recorded digital didactive sessions (ensuring materials), virtual on-line simulations, case-based facilitated group learning, and bed-side preceptor-directed simulation drills form the basis for this progressive and original program.

In 2021 we have added several additional opportunities. We will offer Transthoracic Echocardiography in Pregnancy to attendees on their scheduled afternoon off, as well as the following pre-conference labs that will take place on Wednesday, November 4th.

- Training the Trainer’s: Learning to Implement Simulation Science at Your Center
- Critical Care Gyn: Do you Have What it Takes?
- Hands-On Gyn Laparoscopic Cadaveric Lab

This course is designed to help general OBGYN’s and Maternal Fetal Medicine specialist incorporate minimally invasive techniques for placement of transabdominal cerclage and total hysterectomy. The course will include a didactic session on pelvic anatomy, cervical insufficiency, and the basics of a total laparoscopic hysterectomy. The majority of the time will allow for hands-on experience in a cadaveric lab for all registered participants.

Who should attend?
- MFM Physicians and Fellows
- Emergency Room Physicians
- Certified Nurse Midwives
- Practicing OB Physicians
- OB/GYN Residents
- Nurse Practitioners
- OB Hospitalists
- Medical Students
- Obstetrical Nurses

To register, please call: 602.230.2273 (CARE) or www.bannerhealth.com/230CARE
OB/GYN Faculty

These physicians make it possible for The Women’s Institute to be able to say we are making health care easier, so life can be better.

Mohammad Ahmad MD
Marina Amaya MD
Martin Arellano MD
Ali Azadi MD
Randall Ball MD
Belinda Beck MD
Alka Bennion MD
Snehalkumar Bhoola MD
Matthew Borst MD
Cesar Castro-Marin MD
Dana Chase MD
William Chavira MD
Megan Cheney MD
Curtis Cook MD
Emily Cyr MD
Heather Dalton MD
Gregory Desanto MD
Sarah Detlesfs MD
Pooja Doehrmann MD
Lydia Ehlenberger MD
John Elliott MD
Laurie Erickson MD
Kari Evans MD
Joel Falk MD
George Figueroa MD
Michael Foley MD
Kisti Fuller MD
Caroline Geer MD
Denise Gentles-Ford MD
Jill Gibson MD
David Glassman DO
Thomas Glodek MD
Kendra Gray DO
David Greenspan MD
Ravindu Gunatilake MD
Sujatha Gunnala MD
Vinay Gunnala MD
Jesse Hade MD
Carol Hahn MD
Karen Hannahford MD
John Harpenau MD
Lexie Hebets MD
Stephanie Hedstrom MD
Michael Hervey MD
Jeffrey Higley MD
Kathleen Horowitz MD
W David Huff MD
Christopher Huls MD
Madison Hustedt MD
Paul Isaacson MD
Brock Jackson MD
Laurel Kubby MD
Kathleen Kuhlman MD
Steven Laband MD
Michael Leovic MD
Monique Lin MD
Kristin Livingston MD
Brian MacArthur MD
Nichole Mahnert MD
Shazia A Malik, MD, FACOG
Maria Manriquez MD
Kate Maroney MD
Paul Marshburn MD
John Martin MD
Staci Mayer MD
Laura Mercer MD
Drew Moffitt MD
Bradley Monk MD
Jean Moon MD
Janet Moore MD
Jamal Mourad DO
Linda Nelson MD, PhD
Steven Nelson MD
Jack Obadia DO
Chijioke Offor MD
Chien Oh MD
David Orenstein MD
Erin O'Sullivan MD
Avinash Patil MD
Jordan Perlow MD
Enriqueta Porras MD
Celeste Pottorff DO
Marquia Redden-Grier MD
Elizabeth Reynoso MD
Deanna Rolstead MD
Mary Romero MD
Kelly Roy MD
Kelley Saunders MD
Kathleen Schwartz MD
Dennis Scribner MD
Marshall Smith MD
Michael Smith MD
Diane Spieker MD
Eleanor Stanley MD
Roman Starikov MD
Nicole Stegman MD
Daniel Stone MD
Keri Sweeten MD
DeShawn Taylor MD
Mani Tehranchi MD
Neil Trachtenberg MD
Michael Urig MD
Felipe Videla MD
Debra Wickman MD
Danielle Williams MD
Marneece Williams MD
Lyndsay Willmott MD
Shana Wingo MD
Candice Wood MD
Heather Zechman MD
Key Faculty Scholarship

Megan Cheney, MD MPH, FACOG

Presentations
• Fetal Aneuploidy Screening. Department of OBGYN at University of Arizona. Phoenix, AZ. April 2020.
• Office Gynecology. Department of OBGYN at University of Arizona. Phoenix, AZ. April 2019.
• Cost-Effective Practices in OBGYN Care. Banner University Medical Center Department of Family Medicine. Phoenix, AZ. October 2013.

Books/ Chapters/Papers/ Publications

Media Interviews
• Panel interview. Meet the Expert Series-- OBGYN. Banner University Medicine community outreach.
Michael R Foley, MD

National and International Presentations
• Symposium Medicus- Alaska- Critical Care Symposium (DKA in Pregnancy, Cardiac Disease in Pregnancy, Hypertensive Emergencies during Pregnancy, Ancient Wisdom for Modern Medicine-Preventing Burnout, and Pulmonary Edema in Pregnancy)
• Ancient Wisdom for Life Fulfillment for Medical Program Coordinators- BUMCP
• Society for Maternal Fetal Medicine Academy for Leadership and Development- National Maternity Hospital in Dublin, Ireland
• Midwestern University “Finally Understanding the Clotting Cascade and DIC during Pregnancy”- Scottsdale, AZ October 2017
• Central Association OBGYN National “Ancient Wisdom for Modern Medicine-Igniting Your Passion as a Health Care Provider”-Scottsdale, AZ
• Resident Retreat- Emotional Intelligence 2.0, October 2017
• SMFM Fellows Retreat-Ancient Wisdom for Modern Medicine-Chicago, IL, October 2017
• Critical Care in Obstetrics-Hypertensive Emergencies- Scottsdale, AZ, November 2017
• Critical Care in Obstetrics-Finally Understanding DIC Scottsdale, AZ, November 2017
• Ancient Wisdom for Modern Medicine-Banner Day of Learning BDMC Mesa, AZ, November 2017
• Medical Complications in Pregnancy: Hypertensive Emergency
• Cardiac Disease in Pregnancy-Risk Analysis, Phoenix
• Hypertensive Emergencies during Pregnancy- New Thinking for an Old Problem, Glendale, AZ April 5th, 2018 Obstetric Challenges
• SMFM Academy for Leadership and Development— Denver, CO

Books/Chapters/Papers/Publications
• Up to Date on line publication “Cardiovascular Physiology during Pregnancy” Up to Date on line publication “Cardiac Transplant and Pregnancy” October 2017
• Seminars in Perinatology Co-Editors: Roman Starikov, Michael Foley 1) Multidisciplinary Obstetric Critical Care Delivery- The concept of the “Virtual” Intensive Care Unit. Issue Feb 2018
• AJOG Feb 2018 Vol 218, No 2 SMFM” Putting the M back in MFM: Addressing education about disparities, maternal outcomes and care” L Moroz MD, LE Riley MD, M D’Alton, MD, HL Brown, MD, M Foley MD, CR Graves MD, J Shefield MD, M Zerden, MD MPH, A Bryant MD, MPH

National Leadership Positions
• SMFM—Putting the “M” in MFM. National program to reduce Maternal Mortality.
• Ancient Wisdom for Modern Surgery Lecture, December 19, 2020, BUMCP - Phoenix, AZ, Surgery Grand Rounds
• 3. CREOG Lecture: Pulmonary Failure, OBGYN Resident Noon Conference, 1/8/2020 BUMC-P, Phoenix, AZ
• OBGYN Lecture: OB Emergencies Simulation (PPH, Shoulder Dystocia, Maternal Code), 1/22/2020 UA - HSEB B416, B427, B428, Phoenix, AZ
• Course/Lecturer: SMFM High Impact Practice Management, Feb. 28-29, 2020. BUMCP, Phoenix, AZ.
• Webinal-SMSM Leadership during the Pandemic, March 2020

Online only publications:
• UPDATED ARTICLE: “Maternal adaptations to pregnancy: Cardiovascular and hemodynamic changes.” UpToDate.com
Key Faculty Scholarship

Melissa Herbst-Kralovetz, PhD

National and International Presentations

• University of Arizona, College of Medicine-Phoenix, Phoenix, AZ. AAMC Attendee Workshop. April, 2019. Strategy that works: Developing and Executing an Effective Strategic Plan
• Northern Arizona University, Center for Applied Microbiome Science Seminar, Flagstaff, AZ. June, 2019. Translating Microbiome Research to Improve Women’s Health
• Banner University Medical Center-Phoenix, Obstetrics and Gynecology Resident Research Seminar, Phoenix, AZ. Sept. 2019. Translating Microbiome Research to Improve Women’s Health and Collaborative Opportunities

Books/ Chapters/Papers/ Publications

• Cavendish 2019 Phoenix BioHealth Impact Forum, Phoenix, AZ. October 2019. New Directions in Cancer Care Speaker and Panel Member.
• Relimage Health: Is My Fate in My Genes? Symposia, Phoenix, AZ. Nov. 2019. Tackling Cancer Health Disparities in Women through Integrated Multi-Omics Approaches (Speaker and Co-Chair for Panel Session)
• Arizona Conference on Developing Therapeutics for Cancer and Immunotherapy Symposia, Phoenix, AZ. Dec. 2019. Predicting features of the cervical cancer microenvironment through integrated multiomics analyses (Speaker and Session Co-Chair on Microbiome and Cancer)
• Townhall on Advancing STEM Equity at Minority Serving Institutions at the University of Arizona, Tucson, Arizona. Jan. 2020. Gender Equity in STEM sponsored by the National Academy of Sciences, Engineering and Medicine (NASEM)

Presentations

• Gardner, J.K and M.M. Herbst-Kralovetz. IL-36gamma induces a transient HSV-2 resistant environment that protects against genital disease and pathogenesis. Cytokine. 2018. PMID: 30118914
C. Kevin Huls, MD

Publications

National Leadership Positions
• Editorial Board Member – Scientific Reports
• National Institutes of Health—Study Section Member

Brian MacArthur, MD

Publications

Presentations and Posters

Leadership
• BUMCP OBGYN Chief of Service
• Phoenix Perinatal Associates Hospitalist Medical Director
Key Faculty Scholarship

Nichole Duran Mahnert, MD

Books/ Chapters/ Papers/ Publications
Peer-reviewed

Shazia Malik, MD, FACOG

Books/ Chapters/ Papers/ Publications
Peer-reviewed

National Leadership Positions
• AUGS (American Urogynecology Society) Membership Committee Member. 2015 October—2019 October.

Trials:
• Primary Investigator in a multi-centered trial: VAPOR VesAir PivOtal tRial. This is by Solace Therapeutics and started in 2020. This is a second phase FDA trial for an in office procedure where an intravesical balloon is placed to treat stress urinary incontinence. I was a PI in the first trial as well starting from 2016.
Laura Mercer, MD

National and International Presentations


Publications

- Smith RB, Erickson LP, Mercer LT, Hermann CE, Foley MR; Improving obstetric hemorrhage morbidity by a checklist-based management protocol: a quality improvement initiative; European Journal of OBGYN and Reproductive Technology; 236 (2019) 166-172

National Presentations and Workshops:


Leadership:

- ACOG Obstetrics Practice Bulletin Committee, Member
- ACOG National Medical Student Program, Co-Director
- ACOG District VIII Medical Student Recruitment Committee, Co-Chair
- ACOG Arizona Section Vice Chair
- ACOG Arizona Section Junior Fellow Advisor
- Arizona Long Acting Reversible Contraception (LARC) Coalition, Member
- Phoenix OB/GYN Society, President-Elect
- College of Medicine – Phoenix, Simulation Curriculum Subcommittee, Inaugural Chair
- College of Medicine – Phoenix, Clinical Curriculum Subcommittee, Co-Chair
- College of Medicine—Phoenix, Assessment Task Force, Member
- College of Medicine—Phoenix, Assessment and Evaluation Subcommittee, Member
- College of Medicine—Phoenix, Clinical and Competency Based Education Task Force, Member

National Honors and Awards

- 2020 Association of Professors in Gynecology and Obstetrics William N. P. Herbert MD Promising Educator Award
Key Faculty Scholarship

Jamal Mourad, MD

Publications


In Progress

Obstetrics & Gynecology

• Essentials in Minimally Invasive Gynecology Manual Skills Construct Validation Trial Malcolm G. Munro, MD, Arnold Advincula, MD, Erika H. Banks, MD, Tamika C. Auguste, MD, E. Britton Chahine, MD, Chi Chiung Grace Chen, MD, MHS, Howard L. Curlin, MD, Elisa M. Jorgensen, MD, Jin Hee Kim, MD, MS, Cara R. King, DO, MS, Joelle Lucas, MD, Magdy P. Milad, MD, MS, Jamal Mourad, DO, Matthew T. Siedhoff, MD, MSCR, M. Jonathon Solnik, MD, Christopher C. Destepano, MD, MPH, and Kim Thayn, PhD, for the Essentials in Minimally Invasive Gynecology (EMIG) Steering Committee*

Current Opinion

Jordan H. Perlow, MD
Associate Director: Maternal-Fetal Medicine
Phoenix Perinatal Associates / Obstetrix Medical Group of Phoenix
Immediate-Director Maternal Fetal Medicine Division: Banner University Medical Center – Phoenix

Academic Activities: 2019 – Present
- Judge: University of Arizona College of Medicine Phoenix; Academic Excellence Day. May 2019

Publications

Abstract Publications / Poster Presentations
- Leovic, MP, Perlow JH. Impact of uterine closure technique at time of cesarean section on development of abnormally invasive placenta. Obstet Gynecol 133:132s; 2019
- Leovic, MP, Perlow JH. Anterior placentaion without previa in patients with prior cesarian section: What is the risk of accreta?. Obstet Gynecol 133:81s; 2019

Textbook Chapters

Lectures
- 4th International Conference on Obesity and Chronic Diseases. Obesity and Pregnancy: A Dangerous Duo July 1, 2019 San Francisco, California
- Obesity and Pregnancy: Epidemiological Overview and Perinatal Impact. MFM Fellowship Lecture Series University of Arizona College of Medicine Banner University Medical Center Phoenix July 11, 2019

Reviewer of Scientific Paper Submissions
- Abstract submissions: SMFM Annual Clinical Meeting
- American Journal of Obstetrics and Gynecology
- American Journal of Obstetrics and Gynecology: MFM
- Obstetrics and Gynecology
Key Faculty Scholarship

Kelley T. Saunders, MD, MPH

Posters and Presentations
- Mercer, Laura MD; Norton, Taylor MD; Alley, Addison MD; Saunders, Kelley T. MD; Erickson, Laurie MD. The Scariest Coaster of Their Career? A Comprehensive Strategy to Support Graduates During Oral Boards Prep. CREOG and APGO Annual Meeting, Orlando, FL. Co-presenter, February 27, 2020.


Debra Wickman, MD

National and International Presentations
- 3rd Annual International Conference on Obstetrics and Gynecology, "Women's Bodies and the Power of Pleasure in Medical Care" Paris, France February 2019.
- Health Futures Radio Segment, "Sex as a Priority for Optimal Health” Scottsdale, AZ April and September 2019.

Books/ Chapters/Papers/ Publications
Publications from NICU Providers

- Neo Conference Feb 2020: Who should we treat with Inhaled Nitric Oxide: Panel Discussion by Ellsworth Marc A

Snapshot of Continuous Quality Improvement Projects in the NICU

- Apnea and Bradycardia Guideline
- Therapeutic Hypothermia Protocol
- Neonatal Abstinence Syndrome Protocol
- Neonatal Sepsis Guideline
- Small Baby Protocol
- NICU Hypotension management guideline
- Head Ultrasound Guideline
- Retinopathy of Prematurity Guideline