

MAGEE

SPRING 2020

A PUBLICATION OF MAGEE-WOMENS RESEARCH INSTITUTE & FOUNDATION

“I have to see if you are an appropriate candidate. You may not be. I hope you are.”

”
“Our grandmothers and mothers – our aunts and sisters – these women have spent a lifetime caring for others. They deserve a healthcare system ready to meet their needs.”

“How can I best help you?”

“Please take this information, because I suspect you have a friend you are worried about.”

”
“You’re showing signs of postpartum depression. What’s next?”

“We are human beings interacting with other human beings – the more empathy we can bring to the situation, the better.”

HOW DOCTOR-PATIENT DIALOGUE CAN CHANGE LIVES.

POSTPARTUM DEPRESSION:

Clinicians and researchers team up for better diagnostics, delivery of care

DOMESTIC VIOLENCE:

Patient-centered approach helps victims of intimate partner violence

INFERTILITY:

Infertility treatment driven by straight talk

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Meeting Women Where They Are: Placing the Physician-Patient Relationship at the Center of Care

By Courtney McCrimmon

Judy Chang, M.D., M.P.H., poses the same question to every patient – whether new or returning – whom she sees.

“How can I help you today,’ can go a long way,” Dr. Chang explains. “My job, first and foremost, is to create a safe space where patients can express their concerns, but I always begin appointments with the patient’s agenda, rather than mine.”

For Dr. Chang, developing and maintaining relationships with patients drew her to medicine initially and continues to sustain her now. During her undergraduate career, she volunteered at People’s Community Clinic in Austin, Texas, where she witnessed the impact one positive encounter between a physician and patient can make.

“Women would come to our clinic and receive some really scary news about their Pap smears returning abnormally. I learned quickly that the way physicians communicate news to patients can make a dramatic difference. You can help women take some of their control back just by assuring them they aren’t alone,” Dr. Chang said.



“How can I help you today,’ can go a long way.”

-Dr. Judy Chang

The power of relationships has been a central theme throughout Dr. Chang’s career, from her years as a women’s studies major in college to the trajectory of her research at Magee-Womens Research Institute. “My research and my clinical practice are manifestations of my feminism,” Dr. Chang said. “Technology and medicine are incredible, but aren’t what keep me in this career – it’s the potential to positively impact my patients and their stories.”

Dr. Chang credits Dr. Robert Arnold, Assistant Medical Director of Palliative Care for the Institute for Quality Improvement at UPMC as an inspiration and mentor. Early in her career, he shared core communication techniques that focused on patient-centered values, giving space for concerns that were emotional rather than medical.

“He was an incredible influence,” Dr. Chang said.

Dr. Chang is committed to the idea that communication between patients and their clinicians is central to providing quality medical care and promoting wellness and healing. At MWRI, her research group focuses on identifying how to improve this communication, especially when it comes to addressing social determinants of health and sensitive topics including substance use and domestic violence. Her team studies the intersection between women in the context of their lives, sociocultural influences, and interpersonal relationships and the health services used, offered, and needed.

“Our overall objective is to identify and promote communication styles, approaches, and skills that facilitate positive behavioral change, especially for pregnant moms,” said Dr. Chang. “Our most recent work has focused on smoking cessation counseling and patient-provider screening and counseling communication with substance use.”

With an expertise in qualitative research methods, behavioral interventions, and methods of communication, Dr. Chang’s research lends significant relevance to her clinical practice.

One of the best communication techniques for physicians is what Dr. Chang refers to as Ask, Tell, Ask. When a physician enters a patient’s room, asking the patient what brings them in for the day can help zoom in on what’s important, even if it’s a routine check-up. Relationship-centered communication begins with asking: what are a patient’s thoughts and concerns? What are they worried about? A patient’s impression of why they are there could be very different than the physician’s, and clarifying the reason for a visit can set the tone for the rest of the visit.

When asked how patients can take an active role in communication, Dr. Chang encourages them to remember that doctors and nurses are human, too. Providers are in the field to help people, and if they are running late it isn’t out of disrespect – it’s because a particular patient required additional attention. Dr. Chang emphasizes the need to remember we are all human.

“We have to prioritize the humanistic,” Dr. Chang emphasizes. “We are human beings interacting with other human beings – the more empathy we can bring to the situation, the better.”

Dr. Chang also embraces a trauma-informed approach to caring for patients, cognizant that one out of three women have experienced physical and/or sexual abuse from their partners.

“Safety and respect – those two themes carry a lot of weight. I work with every visit to create a safe space for my patients, and to demonstrate respect. I always tell my patients how glad I am they came to see me – that one moment can change everything.”

Dr. Chang is currently the president-elect to the Academy for Communication in Healthcare, an organization at the forefront of research and teaching relationship-centered healthcare communication. She will serve as president in 2021.

To read about Dr. Chang’s intimate partner violence research, go to page 6.

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LOOK ME IN THE EYE

**PATIENT-CENTERED APPROACH HELPS VICTIMS OF
INTIMATE PARTNER VIOLENCE FIND THEIR VOICE**

By Niki Kapsambelis

Twenty-five years after the fact, the conversations Dr. Judy Chang had with women who were victims of intimate partner violence remain as vivid as they were in the moment.

There was a physician's wife who traveled more than an hour to get to the shelter where Dr. Chang was a volunteer; she was worried that she'd be recognized at the one closer to her home, where her husband had referred some of his patients. Another woman was a lawyer; a third was a teacher.

"Those conversations were so emotional and so charged at that time," says Dr. Chang, who has been advocating for victims of intimate partner violence since shortly after finishing her



It taught me to be patient centered, or client centered. To ask, “How can I best help you?”

Dr. Judy Chang

Though she began her journey as a volunteer, those long-ago voices remind her every day — whether she is treating patients, teaching medical school students, or researching how to better communicate with potential victims — that the difficult conversation surrounding domestic violence is worth having, because it may be the dialogue that saves someone’s life. Now widely recognized for her expertise in this field, Dr. Chang’s research represents what might have been a road not taken, but for the voices of those women and the effect it had on her as both a clinician and researcher.

“In my mind, I thought it was kind of compartmentalized: it was good experience; I learned a lot,” Dr. Chang says of her early volunteer work. But when she embarked on her career in obstetrics and gynecology, “I didn’t necessarily think it would overlap, which was probably very naïve of me.”

It was 1995, and Dr. Chang was seeing patients who came in for birth control refills or Pap tests — routine gynecological care. But enough of them also revealed their exposure to domestic violence that Dr. Chang began to wonder: how could she, as a healthcare provider, better address this problem she was seeing?

When she spoke to more senior colleagues about how prevalent domestic violence seemed to be, they told her that they remembered when things were even worse: it was an issue that society tolerated, to a certain extent, in previous generations.

“That is not happening anymore,” says Dr. Chang. “Women now know that they can talk about it.”

But not everyone is ready to talk, which is something she is helping providers understand.

“In medical school, we were taught how to take a history,” but that was an exercise in looking for symptoms to relate to a protocol, diagnosis, and treatment plan, Dr. Chang explains. “There was no focus on patient-centered communication or the need to listen to patient values and patient perspectives.”

Rather, Dr. Chang found herself in role-playing exercises being too directive, telling potential victims, “Here’s what’s going on; here’s what you need to do.”

An indirect path to empowerment

Survivors of domestic violence are helping to fuel a different approach — one that sets the stage to make victims’ connection to resources a more empowering option.

“Telling another person what to do is not empowering; it’s essentially bossing another person around,” which is something many women are already experiencing from their partners, at a time when they already question their own judgment, explains Dr. Chang. “If we’re giving advice, it’s going to be in an indirect way: ‘These are things that other people have found helpful. Can I share them with you?’”

In her seminal 2005 study of the topic, Dr. Chang incorporated the recommendations of women who had experienced domestic violence to help health care providers better understand how to reach them.

“What I had noticed when looking at the literature was: We need to do this. This is what women need. But there were not really the voices of the women themselves,” she recalls. She asked herself: “How do we know what they need? We haven’t asked them.”

She formed focus groups of survivors, and posed the questions: what advice do you have for us, as providers? From them grew the foundation of a new approach.

Some of the answers were comforting: the women said they felt better knowing that someone cared about them, that they weren’t alone. It was empowering to realize that their experiences were not normal or healthy.

But other answers were enlightening, too.

Talk to me when I’m dressed, they said.

Slow down.

Look me in the eye.

Don’t ask me when my partner is in the room, said a woman who spoke limited English and relied on her husband to interpret for her.

If I do tell you, don’t brush me off because you are pressed for time.

If I don’t tell you, recognize that it’s because disclosure is really hard. But find a way to give me the information anyway.

“Those are some of the things they said, which made me realize this whole process is not simple. It’s not just checking a box,” says Dr. Chang. “It’s not important that we know (they were victimized), even. It’s more important that people know it’s not normal, it’s detrimental to their health, there is help available, and they’re not alone ... It taught me to be patient centered, or client centered. To ask, ‘How can I best help you?’”

She began looking for alternate ways to convey the information: scattering posters and brochures around the office, or saying, “I’m so glad this is not happening to you, but it’s so common — please feel free to take this brochure and this hotline number, and share it with friends.”

Younger patients, universal education

Dr. Chang’s longtime collaborator, Dr. Elizabeth Miller, serves as a professor of pediatrics and the director of the Division of Adolescent and Young Adult Medicine at UPMC Children’s Hospital of Pittsburgh. Together, they have worked to create programs that offer primary prevention and address cultural attitudes related to gender and violence. Their goal is to amplify the concept of universal counseling and education by helping providers improve their communication skills.



According to Dr. Miller, the potential for relationship abuse starts early, making the job of the provider especially challenging.

“Young people do not necessarily even recognize coercive behaviors. Most young people have had very limited comprehensive sexual health education,” she says. “We have done an abysmal job in prevention education around healthy relationships, and specifically healthy sexual relationships. Developmentally, there is this huge gap for adolescents.”

Simply asking a teen if they have been abused doesn’t work, and very few share their experiences with adults — or even friends.

“So the approach that we have taken in the clinical setting is to shift away from screening questions to universal education about healthy and unhealthy relationships and offering resources and awareness about adolescent-relevant services,” Dr. Miller explains.

Despite the widespread prevalence of relationship abuse in adolescents — including emotional and psychological abuse, cyber dating problems, receiving texts of unwanted sexual content, and controlling behavior — “I have never had a young person walk into my clinic and say, ‘Dr. Miller, I’m in an abusive relationship, and I need help,’” she says.

More often, the patient is there for another reason: seeking a pregnancy test or information about a sexually transmitted infection, but refusing birth control, for example — and the provider never asks why.

But when the clinician offers information in a roundabout way — “I would like you to take this information because I suspect you have a friend you are worried about” is one approach Dr. Miller suggests — their research shows a significant reduction in abuse, which demonstrates that teens will make use of content that a doctor offers indirectly.

“They’ll tell you when they’re ready. It’s really about developing a relationship,” she says.

The doctors also are studying how training everyone in a healthcare setting — including administrative staff, not just clinicians — has helped extend their ability to connect potential victims with resources. Dr. Chang said research she conducted with Johns Hopkins University measuring the efficacy of this approach is currently in data analysis.

Despite differences in cultural attitudes surrounding domestic violence, the doctors’ research contributions are finding some traction outside the United States.

Through a partnership with the Center for Gender Equity and Health at the University of California-San Diego, Dr. Miller says this universal method is resonating in versions adapted for Kenya, India, and Bangladesh.



“Young people do not necessarily even recognize coercive behaviors.”

Dr. Elizabeth Miller

One of Dr. Chang’s undergraduate students, Janice Im, received funding in the summer of 2019 to travel to Ecuador, where she designed a qualitative study to interview healthcare providers and victims of domestic violence about how they navigate resources as well as other mental health issues.

During the summer, Im used Skype to connect with Dr. Chang’s team to work through some of the hurdles she faced. For example, many of the women she met were unfamiliar with the concepts of mental illness or domestic violence, because it was so prevalent and accepted in their surroundings.

A better teacher, a better doctor

As an educator, Dr. Chang hopes she is imparting to her students a mindset that was not the norm when she was in medical school — one that encourages physicians to partner with their patients, not dictate to them. She has adapted her teaching style to incorporate some of the skills she has learned in working with patients: asking open-ended questions to elicit discussions, and giving them more room to engage.

“I want this to be pragmatically useful,” she says in describing her philosophy to her students. “I want you to feel like this is not a topic that you have to run away from.”

As a clinician, she is also reaping the results of what she has learned.

“I feel like I am getting to know my patients better. And in that regard, I think I am eliciting more relevant, useful information than I used to,” she says.

Instead of running through a template of symptoms, which only tell part of the story, she sits back and listens. Is the patient working three jobs? Is she only able to fill some of her prescriptions, so she only takes her insulin every other day to make it last longer?

“These approaches have allowed me to be the discoverer,” says Dr. Chang.

And while more patients seem to feel they can advocate for themselves, there are still educated, empowered women who feel there are topics they can’t broach or who worry about wasting the doctor’s time. By creating an environment that communicates the opposite — that their concerns matter — Dr. Chang hopes to elicit more information about the issues that matter to the patient.

“It does make a difference,” she says.

Niki Kapsambelis is a science writer for Magee-Womens Research Institute. Contact her at adlernk@mwri.magee.edu.



Clinicians and Researchers Team up for Better Postpartum Depression Diagnostics, Care.

By Niki Kapsambelis

Identifying when a patient is suffering from postpartum depression and taking a quick course of action is often much harder than taking care of any other urgent medical concerns that patients may have.

When one of Dr. Sukanya Srinivasan's patients suffers stroke-like symptoms, she has a plan of care in mind. As a family medicine physician for 20 years, she is familiar with the resources in the medical community to handle this patient safely and effectively.

However, if a young mother is exhibiting signs of emotional distress, lines begin to blur.

"I've got her in; she clearly needs help. Now what's next?" Dr. Srinivasan says. "There isn't as direct a connection with behavioral health providers like there is with physical health providers because of access, privacy, stigma, and cost."

Historically minimized and often misunderstood, postpartum depression — including anxiety and other mood disorders — is one of the four biggest killers of women in the first year after they give birth, according to Dr. Hyagriv Simhan, Vice Chair of obstetrical services at UPMC Magee-Womens Hospital. In each of those disease states, knowledge and care gaps prevent providers from optimizing treatment.

Part of the problem is the difficulty of identifying risks for postpartum depression. Women may not be willing to share what they're feeling, or may not even understand that they are at risk, thinking they're just tired from the rigors of new motherhood.

"You're sleep deprived, especially if you're nursing. You can see how that would become extremely socially isolating," explains Dr. Richard Beigi, President of Magee Hospital.

Layered on top of those barriers are issues that plague many facets of health care, from a lack of transportation to a lack of insurance or time for appointments.

And the stakes couldn't be higher.

"It can kill people," Simhan says bluntly. "But even if it's not lethal, it's costly, morbid, and I think just looking at death related to depression is just the tip of the iceberg."

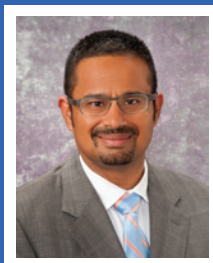
While some women may only experience depression around childbirth, for others, it might be a window to an underlying chronic condition. Identifying and treating it is an opportunity to reduce cost, consequences, and preserve quality of life, while also reducing the likelihood of its secondary effects, including diabetes and hypertension.

According to the National Institute of Mental Health, postpartum depression — defined as feelings of sadness and anxiety that interfere with a woman's ability to care for herself and her family — occurs in up to 15 percent of all births. While it can begin shortly before or anytime after childbirth, it most commonly begins between a week and a month after delivery.

Yet while the condition is common and potentially lethal, during the last decade, only one new drug — brexanolone — has been approved by the U.S. Food and Drug Administration to treat postpartum depression, according to Dr. Simhan. The drug does present barriers: it requires continuous IV infusion in a hospital setting for 60 hours. Other postpartum treatments include psychotherapy, selective serotonin reuptake inhibitors, or other medications.

“We’ve made a lot of strides in optimizing screening and trying to triage the appropriate care afterwards.”

Dr. Hyagriv Simhan



Breaking down barriers

To create better care, researchers and clinicians are developing an array of strategies designed to both better diagnose risk and connect women to treatment.

Magee Hospital held a January symposium called *Focus on the Fourth* – referring to the 12- week postpartum period after birth of a child, which is now being called the “fourth trimester” by numerous national organizations, including the American College of Obstetricians and Gynecologists.

During the symposium, leading experts offered current knowledge and guidance on the medical and psychological issues that women face during this difficult transition time, including direct access to postpartum depression counseling to which Dr. Srinivasan has since referred some of her patients.

“The good thing for us is over the years we have really developed what I see as a spectrum of services to meet people both where they are and with what they need,” says Dr. Priya Gopalan, chief of psychiatry at Magee Hospital. “We have a robust integrated care program.”

Three OB/GYN practices have added behavioral health specialists, and UPMC plans to expand this integration of care, which allows a woman to visit a therapist at the same time she is at the practice for prenatal or postpartum care.

“We are under the belief that sometimes coming to a place labeled as ‘behavioral health’ may be stigmatizing, so we are trying to put more behavioral health scientists in the offices where patients are being seen,” Dr. Richard Beigi explains, adding, “There’s a lot of stigma around these problems: there’s real stigma, and then there’s perceived stigma.”

In order to increase access and identification of women at risk, Dr. Srinivasan has also adapted her own practice to reach out to women who come in with their children for well-baby visits, based on a model developed by the IMPLICIT (Interventions to Minimize Preterm and Low birth weight Infants using Continuous quality Improvement Techniques) Network. Knowing that some women don’t always seek care for themselves but reliably bring their children, the network developed and implemented a system of maternal health screenings, including postpartum depression, taking full advantage of this window of opportunity.

“Women go where their children go,” Dr. Srinivasan says. “It’s a useful entry point to having mothers talk about their needs. Patients are grateful for this inquiry into their health.”

Seeing the immediate need in his practice helped inform Dr. Simhan when he and two collaborators — Tamar Krishnamurti and Alex Davis of Carnegie Mellon University — developed the new My Healthy Pregnancy app, which has been in the design phase for seven years and debuted for expectant mothers to use in November 2019.

Using a combination of medicine, machine learning, and decision science research, the three created a tool that gathers risk data from users while communicating personalized health information on a variety of topics, including mood disorders.

The app asks each woman slightly different questions based on her unique situation, says

Krishnamurti, who is an assistant professor of medicine at the University of Pittsburgh as well as an adjunct assistant professor of engineering and public policy at Carnegie Mellon. It then helps the patient connect with resources to help her.

“Every individual has a different risk trajectory that changes depending on events that occur. We developed these algorithms, and as a result, ask questions throughout their pregnancy,” she says. “We wanted to build a tool that wasn’t just usable for clinical risk predication, but was also useful for the person to connect in a way that routine prenatal care wouldn’t allow for.”

Having a data-driven tool may also help women who aren’t necessarily aware that they are approaching a tipping point into postpartum depression.

“We tend to normalize what we go through. There is a lot of denial, and there is a lack of awareness of depression and anxiety generally in society,” Dr. Gopalan points out. “I think that’s slowly changing.”

Fueling new discoveries

In addition to providing care, My Healthy Pregnancy also collects data that will be helpful in refining the tool and developing other interventions.

“It’s a product of clinical care, but also an important clinical tool for research,” explains Dr. Simhan. “That’s a really nice platform to do things like biomarker discovery within those populations.”

In another collaboration, Dr. Simhan is working with Dr. David Peters, an expert in human genomics at Magee-Womens Research Institute. After gathering a spinal fluid sample, they will phenotype the samples to try and identify potential biomarkers for depression. Already, Dr. Peters and his colleagues have published research describing biomarkers in a study of men and women who were treated for major depressive disorder.

“What we’d like to do is look for these metabolic anomalies in women. We’ll get a sample when they’re here, delivering. And we want to know if they have metabolic anomalies that relate to depressive disease,” Dr. Peters says.

For Dr. Simhan, phenotyping is another potential tool in a multifaceted approach to addressing postpartum depression.

“I think if we understood the phenotype better from a biologic perspective, that might open the door for new therapeutic targets,” he says, emphasizing the importance of a biologic test being useful to those who deliver care. Because Magee encompasses both a large hospital and the research institute, it’s uniquely situated to help develop those tools, he adds.

“We’ve made a lot of strides in optimizing screening and trying to triage the appropriate care afterwards,” Dr. Simhan says, though he adds, “We’re not done, for sure.”

Postpartum Depression Resources

If you or someone you know are experiencing symptoms of postpartum depression, UPMC-Magee-Womens Hospital offers a variety of resources that can help.

- **PsychCare+** is UPMC’s behavioral health referral line: 412-624-2000. This hotline is staffed 24 hours a day, seven days a week.
- For people experiencing a mental health crisis, contact **Psychiatric Emergency Services** at 412-624-1000 or toll-free at 1-877-624-4100, also 24/7.
- In addition, a growing number of **OB/GYN practices** are adding behavioral health specialists on site for women who are receiving prenatal or postpartum care.
- If your practice does not yet have a behavioral health specialist, you can visit the **Behavioral Health Clinic** on-site at UPMC Magee-Womens Hospital, which has expanded its hours. Call 412-641-1238 for more information.
- **The New and Expectant Mothers Specialized Treatment (NEST) Intensive Outpatient Program** offers women who are pregnant or up to 12 months postpartum with help for postpartum depression and anxiety. Childcare is available on-site thanks to funding raised by the Pars for Postpartum Depression golf event founded by Magee-Womens Hospital’s Bill Vehovic, Director of Respiratory Services. Call 412-246-5600 for more information.

HOW AI IS HELPING TO IDENTIFY POSTPARTUM DEPRESSION

When trying to determine if a mother's symptoms point to postpartum depression, researchers are relying on a time-honored paradigm: numbers don't lie.

My Healthy Pregnancy, an app introduced as part of UPMC's service line for pregnant women in November 2019, uses a combination of medicine, artificial intelligence, and decision science to detect risks for a variety of issues, including postpartum depression — even when the user doesn't disclose them.

"Sometimes you're not sure how you're feeling, and sometimes you don't want to share," explains Tamar Krishnamurti, an assistant professor of medicine at the University of Pittsburgh as well as an adjunct assistant professor of engineering and public policy at Carnegie Mellon.

Krishnamurti partnered with Dr. Hyagriv Simhan, vice chair of Obstetrical Services at UPMC Magee-Womens Hospital, and Alex Davis, Assistant Professor of Engineering and Public Policy at Carnegie Mellon, to develop My Healthy Pregnancy as a tool for both treatment and research.

The collaborators used several large data sets supplied by Simhan that had followed women from the moment when their pregnancies were confirmed to post-delivery. The data was rich in everything from biomarkers to social determinants, and the team built new algorithms to mine that information for risk prediction.

They also sat down with women who were at high risk for premature birth to learn more about what their pregnancies were like: what barriers they faced, for example, and how they interpreted information and used it to make decisions.

"If you want to communicate something to somebody, and want to engage in behavior change, the thing you're communicating has to make sense to them within the context of the world they're living in," explains Krishnamurti.

The app balances explicit questions — such as checking in every day to see how the user is feeling — with artificial intelligence that detects subtle changes that signal the point at which normal mood fluctuations transition into something more worrisome.

While the data the app collects will help it become more sensitive to detecting potential problems, the team is also planning to study how to improve the tool just by looking at the language people use and how certain words might predict depression, even before the person actually discloses how they feel.

The critical end goal is to help patients connect with the resources they need, says Krishnamurti: "It's really trying to mirror the process you'd receive if you did disclose something to a physician."



CEO UPDATE

Difficult conversations have always been a part of medicine; that's especially true in women's health. For a long time, patients have found some topics delicate or embarrassing, or they might feel intimidated. But we also know how important it is to find a way to make these conversations happen. They improve health and wellness by allowing a more open exchange of information between doctors and patients. They also help science evolve to expand our knowledge base.

The COVID-19 pandemic brought science to the forefront of our national conversation like never before. Every day, it seems as though we're riveted by the words of public health experts and organizations to guide us as we navigate our way through this crisis and its aftermath. It has shown us how vital scientific research is — not just during an emergency, but always.

We at Magee-Womens Research Institute & Foundation live and breathe this work every day. We want to redefine what's possible, and we do that in partnership with you, our patients and donors. By engaging in difficult conversations, you become part of the solution. Whether you are feeling more depressed than usual, or suspect you are in an unsafe relationship, when you raise your voice, you advocate for the health of yourself and others. Some of our greatest impact has come from the patients we treat.

In this issue, you'll read about how these conversations have shaped the way Dr. Judy Chang engages with her patients and helped her develop tools for teaching other clinicians about connecting with theirs. You'll learn how the women Dr. John Harris met early in his career helped shape his research addressing health disparities. And you'll be inspired by the way Kelly Jo Carley's son, Shawn, has worked to help fund research and remove the stigma that his mother felt in seeking treatment for uterine cancer. You'll also learn how Dr. Steve Caritis' generosity is helping

obstetrical residents find links between the clinic and research, and how Mary Beth Mathews' conversation with Dr. Scott Williams helped save the life of her baby.

The COVID-19 outbreak has also taught us to get creative about finding new ways to connect. We are striving every day to do that, whether it's through face-to-face conversation, telemedicine, or an app, helping us to meet people where they are. We're looking at things through a different lens. We take our leadership role in women's health very seriously. Each of these initiatives represents a piece of the overall strategy: to bring everybody along with us as we climb higher and reach further. We invite you to join us, knowing that together, we are all invested in a healthier future.

With warm regards,
Michael J. Annichine, President & CEO

Caring for the Caregivers: Ensuring High-Quality, Compassionate Care for Women Over Their Lifetime



By Courtney McCrimmon

When he was 22 years old, John Harris, M.D., M.Sc., worked in an adult day care center, caring primarily for older women with physical disabilities and Alzheimer's disease.

"You need a formative experience, as a young man, to go into women's health," Dr. Harris said. Now a principal investigator with Magee-Womens Research Institute and director of the Center for Women with Disabilities at UPMC Magee-Womens Hospital, he credits the women he cared for in his early twenties as the inspiration for his clinical research today.

"I loved helping these women. They are amazing individuals who have faced different challenges and learning the nuances behind successfully caring for them inspired me," he said.

It was while working in adult day care and volunteering as a hospice volunteer that Dr. Harris realized how challenging life could be for women with obesity, particularly at the end of their lives.

"Women with obesity can live the lives they want for a long time, and while there is some societal stigma attached with the condition, for the most part they have the quality of life they desire. As they age, however, they begin to realize that their spouses and family members won't be able to easily care for them, and health-related complications mean time needing extra help, sometimes in a nursing home," Dr. Harris said.

Throughout his career, Dr. Harris has been fascinated by the world of health disparities. While there are multiple lenses through which he could examine these disparities, including age, race, and gender, he was drawn to studying disparities among women with obesity because he saw how difficult everyday living could be for them. Whether grappling with society pushing them to look a certain way, to the preconceived notions held by physicians, Dr. Harris has witnessed first-hand how obesity impacts the care women receive over the course of their lifetimes and especially during the end of their lives.

"There is this idea that weight is completely under your control, and it's simply not true," Dr. Harris said. "Right now, one approach we know can be successful for weight loss is surgery, and even that only helps to a certain extent. For women with obesity, I believe we should ensure we are providing the very best care possible, on every other front of healthcare. Let's make sure we do everything else, including preventive and long-term care, extraordinarily well."

As the director for the Center for Women with Disabilities, Dr. Harris is committed to ensuring every patient receives the highest quality, most compassionate care available. Whether they are facing physical or intellectual disabilities, or a combination, patients who come through the clinic are guaranteed that their woman-specific care will be the priority.

"We want to make sure women are getting routine cancer screenings. As a physician, I want to know my patients are living their best lives, so I encourage them to try eating healthier and being more active. The truth is people really struggle to lose weight – we need to find other ways to help them."

Dr. Harris' research focuses on nursing home care for women with obesity. He chose this area of care because nursing homes are, for the most part, straightforward healthcare systems. They usually aren't too large, and to understand how care at the end of life is provided, a researcher doesn't require the intricacies of a complex healthcare network. He is seeking to understand how healthcare systems can improve the care for women with obesity, particularly when patients also have a disability or severe illness, using large survey and claims datasets, as well as in-depth patient and provider interviews. With the support of Magee-Womens Research Institute and a \$1.9 million grant from the Agency for Healthcare Research and Quality, he is striving to understand how people with obesity receive care in the U.S. and how to improve that care for the millions of people with obesity.

"Most obesity research focuses on preventing weight gain or helping people lose weight. I think the missing piece of knowledge is improving how each person with overweight or obesity experiences the healthcare system – more dignity, more equity, more accessibility, and more accommodation – from prevention care needs to end-of-life decisions," he said.

One of Dr. Harris' primary concerns is the fact that our population is aging, but our healthcare systems are designed for women forty and fifty years ago. Women today face different challenges, including complications with weight, and healthcare systems across the country aren't prepared to meet women where they are.

Women with obesity are more likely to develop disabilities at a younger age, and to require more services, including nursing home care. Women with obesity end up in lower quality nursing care homes, where the care can be poor. They are less likely to receive hospice care or die at home than their counterparts, and more likely to die in the intensive care unit.

"Our grandmothers and mothers – our aunts and sisters - these women have spent a lifetime caring for others. They deserve a healthcare system ready to meet their needs, so they are cared for with the same love and compassion they've shown us. I'd like my work to influence that change," Dr. Harris said.

The truth is people really struggle to lose weight – we need to find other ways to help them."

John Harris, M.D., M.Sc.

For more information about Dr. Harris' research, visit:

<https://mageewomens.org/investigator/john-harris-md-msc>

For more information about the Center for Women with Disabilities, visit:

<https://www.upmc.com/locations/hospitals/magee/services/center-for-women-with-disabilities>

A Breast Cancer Patient, a Pregnancy, and a Doctor's Belief in the Power of Decisionmaking: **The Story of Molly Magee**

By Niki Kapsambelis



In the bitter cold January of 1988, a young woman expecting her second child faced the decision every mother hopes she will never have to make: between her own life, and the life of her baby.

Mary Beth Mathews was late into her second trimester when she found a sizeable lump in her breast. At first, she thought it was a blocked milk duct — but a visit to her local doctor revealed something far worse; she had an aggressive form of breast cancer. He advised her to begin chemotherapy immediately.

“What will happen to the baby?” Mary Beth asked. She was told she would have to leave it to fate. But in her heart, she knew the answer.

She returned to the dairy farm in Clymer, New York, where she lived with her husband, Ted, and their 2-year-old son, Casey. Paralyzed by the news, Mary Beth never really saw it as a choice, according to those who knew her best. She was due around the end of March or the beginning of April; she would not seek treatment until her baby was born. She would not risk chemotherapy harming or possibly killing the fetus.

“Mary Beth would have never, ever, ever ended that pregnancy. She would rather have given her life,” says Becky Faulkner, her sister-in-law.

At 32, Mary Beth Mathews was a beloved figure in the region. She was widely traveled, having taught English in Panama before returning to teach Spanish at a seminary in North East, Pennsylvania. But her true vocation was theater. A gifted actress, singer, and dancer, she was a star performer at the Erie Playhouse and other venues for years.

It was there that Ted Mathews first saw her, when his sister and her friend dragged him to see a production of “Brigadoon.”

Opposites attracted; the dairy farmer asked the actress to dinner, and sparks flew. Though she moved to the farm after they got married, she continued to act in the theater, even after Casey's birth. One of her most memorable performances was the title role of “Evita.”

Ted and Mary Beth's story could have been a plot line from a Frank Capra screenplay, until the day she was diagnosed.*

One afternoon at lunch, Ted and Mary Beth had a visitor. Margaret Nyweide was well-known around Clymer, having worked as a teacher when Ted was in school. (“If anyone had something worth listening to, it was her,” Ted recalls.)



Margaret had heard about their dilemma, and she wanted to help. She'd battled breast cancer herself, and she felt there was one place Mary Beth should go for answers: UPMC Magee-Womens Hospital in Pittsburgh.

Ted and Mary Beth hemmed and hawed; they didn't know what to think, or who would listen to them. But Margaret was insistent: "I'll make the call for you," she said.

She put them on the phone with her doctor, Scott Williams, who said he would gladly evaluate Mary Beth as soon as she could make the 2 1/2-hour drive to Pittsburgh.

Galvanized, they got in the car; and true to his word, Dr. Williams sat down with them at 8:00 that night.

"She wanted answers and needed answers," said Dr. Williams, a cancer surgeon who frequently stayed late to sit with patients so he could give them more time to talk about their concerns.

Though he has since retired, he remembers the Mathews case.

"Young women — and she was one — they have a real concern. You want to try and understand as much as you can about a disease that's impossible, on a single case, to understand."

When Dr. Williams was in medical school, patients were never involved in discussions about their treatment.

"I was trained by guys who ... did not tell patients they were going to have an amputation," he says. "We didn't tell them until the night before, because we didn't want them worrying."

Dr. Williams saw things differently. When he was training first-year students at the University of Pittsburgh School of Medicine, he required them to interact with patients and learn how to involve them in decision-making.

"There's nothing more striking than taking a first-year medical student, who's in the first

week of medical school, and you stand up in front of them and you have a 25-year-old breast cancer patient. You talk to her, and you talk to her husband, and all of a sudden, it hits home for these kids: 'My God. This is what I signed up for.' "

Dr. Williams would ask the patient: What does it mean to be a good doctor? Describe for me a time when you thought a physician wasn't interested in your welfare. As the patients answered, the room full of medical students was so silent, he could hear a pin drop.

In one case, a student addressed the young woman who was the patient.

"You know, this is my first week of medical school, and it's very emotional," he said. "I've got tears in my eyes. I'm going to have to do this a number of times in my life. Can you give me any direction?"

She looked him in the eye and said: "Be of (expletive) account."

"That's a great, great answer," Williams says. "It puts things in perspective. If you're not willing to be involved with patients, then don't sign up for this."

Because Mary Beth's pregnancy was so far along, Dr. Williams offered her a new option: he would induce the birth in a month, then begin treatment.

"He was a super individual," says Ted Mathews.

Their daughter was born on March 12, 1988; her parents were so grateful, they named her Molly Magee Mathews, to honor the care that saved her life.

"We were so impressed with the hospital and the people. So what else would you name her?" says Ted.

For Mary Beth, there would be one more year. She drove back and forth to Pittsburgh for a long series of treatments. Family helped take care of the children and the farm; Mary Beth's brother and his wife, Jon and Kathleen

"We were so impressed with the hospital and the people. So what else would you name her?"

-Ted Matthews



"Since she was so young when she passed, I got my first baseline mammogram at 25, before we started to have kids. I'm hoping it's just a fluke thing and not my story, but I guess that's to be determined."

-Molly Magee Smith

Finke, moved in temporarily so Ted could accompany her.

When the chemotherapy was over, Ted and Mary Beth traveled to Boston for a bone marrow transplant, which was experimental at the time. He iced her head to try and stop her hair from falling out. When she went bald anyway, Mary Beth put a headband with a bow on little Molly and a matching one on her own head and posed for a photo.

By the fall, she thought she was better. Her characteristically upbeat personality intact, she posed for a family photo with Ted and the children.

But by December, the cancer returned. A snowstorm hit the dairy farm, and Ted couldn't find his wife; eventually, he located her walking around in a field.

"What are you doing?" he asked her.

"I don't know," she admitted.

It was the cancer, which had metastasized and clouded her ability to think clearly. Despite her illness, Mary Beth rallied enough to sing at a show, delivering for a final time the swan song of Evita Peron — a one-time actress who died from cervical cancer at 33.

The young parents spent Christmas in Pittsburgh; she underwent a mastectomy.

"After that, you were literally counting the minutes and hours watching the cancer move across her chest," Ted said.

Shortly afterward, Becky Faulkner sat in her brother's kitchen as Mary Beth said good-bye to her babies in the next room.

On her last trip to Pittsburgh, Mary Beth Mathews fell into a coma. Back home, 10-month-old Molly was hospitalized with pneumonia; she recovered, but her mother did not. Mary Beth died on Jan. 19, 1989, at 33.

Molly Magee Mathews, now Molly Smith, never spent much time thinking about how she got her middle name when she was growing up; it was just an odd piece of family lore. She and Casey — an Air Force pilot stationed in Japan — were raised by their family on the dairy farm. Her father remarried when she was in kindergarten; on their wedding day, Molly asked if she could start calling her stepmother, Jackie, "Mom."

Yet Mary Beth's legacy to her daughter is apparent to those who knew her. Kathleen Finke sees it in Molly's lighthearted personality, in her sense of humor, in her caring ways.

"Molly is such a blessing, and she does carry on Mary Beth's memory," says Kathleen. "She keeps it going. She's just like her — she's a good mom."

Now 31, Molly is married and a mother of three children living in Nebraska, where she works with children who are transitioning out of foster care, helping them to develop independent living skills.

Because of her mother's history, she underwent genetic testing; though negative for the BRCA gene, Molly remains vigilant.

"Since she was so young when she passed, I got my first baseline mammogram at 25, before we started to have kids," she says. "I'm hoping it's just a fluke thing and not my story, but I guess that's to be determined."

Niki Kapsambelis is a science writer for Magee-Womens Research Institute. Contact her at adlernk@mwri.magee.edu.

BY NIKI KAPSAMBELIS

If at first you don't succeed:

Infertility treatment driven by straight talk

By the time a couple walks into Dr. Marie Menke's office for an infertility consultation, chances are, they've been struggling for a long time.

To meet the medical standard for infertility, they have to have been attempting — and failing — to get pregnant for at least a year. For some, it has been far longer, and the journey has been fraught with frustration, anger, and a desperate search for answers.

So when they sit down to hear their options, the conversation is already beginning with an undercurrent of emotion. And while patients want to hear only positive news, Dr. Menke's primary goal is to set realistic expectations — including the possibility that for some patients, no matter what they do, pregnancy may not be possible.

"That's hard to hear," acknowledges Dr. Menke, a researcher at Magee-Womens Research Institute who also works as a clinician at UPMC Magee-Womens Hospital. "Resetting

what we can do and what we can't do is probably the most difficult part."

For couples confronting infertility, the road to parenthood can be winding, but it begins with straight talk.

Dr. Menke's approach is to begin by listening to her patients, asking them: What are your thoughts? And then she begins to lay out the options and, as objectively as possible, the odds for success.



"Just because a lot of things are available doesn't mean they work a whole lot better."

-Dr. Marie Menke

UNDERSTANDING OPTIONS

Infertility is a common condition, impacting 12 to 13 percent of couples, according to the U.S. Department of Health and Human Services. The Centers for Disease Control and Prevention translate that number to about 6.1 million women in the United States between the ages of 15 and 44. About one-third of infertility cases are attributable to women, one-third to men, and the remaining third are a combination of both.

Age is an important factor: **at 30, a woman has a 20 percent chance of getting pregnant each month. At 40, that number falls dramatically, to 5 percent,** according to Dr. Menke, and odds depend on where the person lands on that spectrum.

Once a deeply taboo subject, infertility has become more culturally acceptable for discussion, particularly as information becomes more readily available. But that doesn't always mean the information was accurate, or that it was appropriate for a person's unique situation.

"What you're finding is: the women who are open are more open than they used to be," says Dr. Menke. "The openness doesn't always help with that first visit. Like anything else, when you're seeking help with something, it depends on who you go to." For example, friends and family may share their success stories about IVF or Clomid, but when the patient finally talks to a doctor, she may be disappointed to learn that it won't work for her.

Dr. Menke has experienced pushback from patients who, desperate for treatment, do not want to hear that they can't just have a prescription; they haven't heard the failure stories.

"It's a difficult conversation to have, to say at first, 'I have to see if you are an appropriate candidate. You may not be. I hope you are.'"

To help patients understand their options, Dr. Menke tries to outline only the treatments that she thinks will work and is willing to try. Because infertility treatments

can represent a significant out-of-pocket expense, she doesn't tell patients what to do, but rather offers examples of what other patients have done as guidance for their decision-making.

And while fertility treatments are much more readily available than they used to be, the end result is not always success.

"Just because a lot of things are available doesn't mean they work a whole lot better," says Dr. Menke. "Medicine doesn't always fix everything. We should stop thinking that."

Technological advances haven't helped with the perception, she notes. Some patients view the doctor as the barrier, or if they don't get pregnant, they question how the treatment plan was executed.

A woman who had a baby with another partner might blame the man, for example, without stopping to consider that the first pregnancy was 15 years ago, and her fertility may be lower. A man whose semen analysis comes back with a poor prognosis may deny the results, arguing: "There's nothing wrong with me."

"We don't see as many couples blaming each other, but I think it's still a worry (for) everybody coming in, that it's all their fault," says Menke.

The analogy Dr. Menke draws is to cardiovascular disease: If a patient has a heart attack, they don't always assume there will be a solution. But in infertility, it's different: couples are anxious, under pressure, and some need an outlet to place blame, whether on the clinic or each other.

"Only in medicine can you pay for something and not expect to have a product," she says. "It's this idea that if you put money into something, you're going to get something back."

But she adds, "what you're paying for is a chance."

“It’s kind of heartbreaking to see how impactful this can be.”

-Dr. Kathleen Hwang



THE RELUCTANT PATIENT

In the office of Dr. Kathleen Hwang, a different kind of conversation is taking place: one that gets very personal, very quickly.

A urologist by training, Dr. Hwang is also the director of Male Reproductive Health and the UPMC Men’s Health Center and an investigator with Magee-Womens Research Institute. She treats male infertility patients, sometimes by referral from Dr. Menke.

“The big difference between when a female patient presents for fertility is they’re pretty good advocates for themselves in seeking care,” Dr. Hwang says. “For the male partner, it’s usually the female partner directing their care and bringing them in — so already off the bat, it’s a little off-kilter, because sometimes they don’t want to be there.”

Reluctant and embarrassed, patients often struggle to even make eye contact. Mindful of how sensitive the situation is, Dr. Hwang’s practice puts a lot of energy into helping them feel as comfortable as possible.



And then there are the questions. New patients have to complete a form that delves into some of the most private aspects of their lives: What kind of lubricant do they use? How often do they masturbate? Although they sound invasive, they are relevant to treatment, and Dr. Hwang strives to help them understand that.

“It takes two to make this conception happen, and it can be very emotionally draining — and physically and mentally draining,” she says. “From the male perspective, they need to perform on command, and it’s so stressful.”

Men often will develop sexual dysfunction from the pressure and from feeling like they’ve failed or disappointed their partner. More than once, a patient who shows up to the appointment by himself will ask quietly, “Listen, doc, do you think this is my fault?”

“It’s kind of heartbreaking to see how impactful this can be,” says Dr. Hwang.

To help counter those emotions, she has found that being as transparent and direct about what she’s seeing as the reasons for the infertility helps patients to cope. She spends a lot of time explaining why she wants them to do the things she wants them to do: stop smoking to improve sperm health. Wear different underwear. When she explains why — that the underwear will help with dilated veins in the scrotum — patients tend to be more compliant.

She may also ask them to bring in their partner so they can sit down as a team; a second pair of ears may hold the patient accountable, and the team approach breaks the problem down in a way that makes it feel more manageable.

Although a few patients will show up and say they don’t want to get their partner pregnant, and they aren’t on the same page regarding treatment, men are more commonly telling Dr. Hwang to stop at nothing because they are desperate to make their partner happy.

A WOMAN’S APPROACH

Dr. Alex Yatsenko, whose research at Magee-Womens Research Institute focuses on infertility, notes the difficulty he has recruiting male patients for studies.

“It’s an art to train a person to be a good study coordinator who can confidently and successfully talk to these men,” he says.

For Dr. Hwang, practicing as a woman in a male-dominated field, the confidence comes easily, borne from the fact that she spends 100 percent of her time talking to men about their sexual function. On the rare occasions where she runs into a patient who can only discuss his problems with a male doctor, she makes a referral.

However, she notes that the gender of the doctor shouldn’t make any difference — gynecology was overwhelmingly practiced by men for generations. She lectures annually at the University of Pittsburgh Medical School about out-of-the-box career choices, and she participates in events promoting women in urology and surgery.

Dr. Hwang notes that she is seeing a higher rate of men who seek consultation for fertility, though she isn’t sure if it’s a higher rate of pathology, or if men are generally feeling more comfortable asking for help.

Many are unaware that testosterone treatments, which are heavily marketed, shut off sperm production; in fact, even some physicians don’t know, Dr. Hwang says, even though other countries offer testosterone shots as a male contraceptive. Almost 20 percent of the patients she sees are using supplements, whether for bodybuilding or some perceived benefit of virility.

If their partners conceive, most want to resume taking testosterone immediately — though Dr. Hwang counsels them to wait until the pregnancy is well established in the second trimester, because it takes at least three months after discontinuing the supplements to start producing sperm again.

“The more concrete I am, the more it tends to sit better with male patients,” she says.

For Dr. Menke, the difficult conversations are something she has come to expect, because they are all part of the care in a complicated topic such as infertility. It’s expensive, it takes time, and it may not work, she notes. Some people may not want to pursue treatment as much as their partners do, a phenomenon Dr. Yatsenko also has observed. And the timing of the decision matters, with age factoring into decreasing fertility.

“Medicine can always be complicated,” Dr. Menke observes. “We’ve learned that difficult conversations are as much a part of diagnosis and treatment as any test or medication.”

Niki Kapsambelis is a science writer for Magee-Womens Research Institute. Contact her at adlernk@mwri.magee.edu.

UPMC Magee-Womens Hospital **Spotlight**

Combatting Maternal Mortality from Bench to Bedside

By Courtney McCrimmon



Forty-nine countries around the world have lower maternal mortality rates than the United States. In every other developed country, and many less affluent ones, maternal mortality rates have been falling, but in Pennsylvania pregnancy-related deaths are rising, with 11.4 deaths per 100,000 live births. For black women, that rate is more than double. But while this information can seem overwhelming, at UPMC Magee-Womens Hospital we are committed to confronting the situation with the very best clinical care, informed by the latest scientific breakthroughs.



Stacy Beck, M.D.

Led by Dr. Stacy Beck, Maribeth McLaughlin, vice-president of operations at Magee, and Vivian Petticord, director of Magee's Women's Health Services line, we've established the Maternal Mortality and Review Committee for UPMC. This collaborative has three specific aims:

- Reduce maternal mortality and morbidity across all races, ethnicities and regions;
- Improve identifications of and care for pregnant and postpartum women with opioid use disorders and
- Improve identification of and care for opioid exposed newborns.

"Right now, we are working to educate primary care physicians, emergency room physicians and first responders to pay attention if a woman presents with warning signs she just had a baby," said McLaughlin. "Women are vulnerable for an entire year after they give birth, but we are particularly trying to bring awareness to the 4th trimester, the critical months after a woman has a baby when complications in her recovery could significantly impact her healthcare."



Maribeth McLaughlin, R.N.

On January 23rd of this year, UPMC Magee participated in Pennsylvania's Maternal Health Awareness Day by holding educational sessions at our Oakland hospital. Discussions ranged from managing postpartum high blood pressure to caring for women with substance use disorders. The day engaged primary care doctors, emergency room physicians, and nurses from western Pennsylvania and emphasized the importance of both caregivers and patients understanding the impact giving birth can have on her health for several months.

"This is a collective effort," said Petticord. "We are working with community outreach groups, social workers, nurses, physicians and researchers in order to reduce mortality rates for mothers and babies."

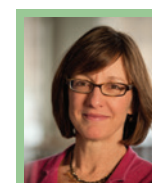


Vivian Petticord, R.N.

We are our research partners at MWRI, we are identifying and developing new strategies, interventions, and treatments for healthier moms and babies. A few of our research highlights include:

Stacy Beck, M.D.

Dr. Beck is the co-chairperson of the Pennsylvania Maternal Mortality Review Committee and a representative for the Pennsylvania Perinatal Quality Collaborative. She is studying ways to minimize post-operative opioid use after cesarean sections as well as evaluating prediction models for postpartum hemorrhage.



Janet Catov, Ph.D., M.S.

Dr. Catov is interested in what pregnancy can teach us about heart disease in women, and how to apply that information to improve pregnancy health and women's long-term health. Utilizing large perinatal registries and cohort studies to evaluate the relationship between cardiovascular risk factors and preterm birth, as well as the postpartum characteristics of women who delivered preterm infants, she is examining the relationship between preterm birth and later life maternal cardiovascular disease risk, emphasizing lipid metabolism, inflammation, and thrombosis.



Steve Caritis, M.D.

Dr. Caritis' research focuses on obstetrical pharmacology and aims to determine the appropriate dosing of commonly used medications for pregnant women. He currently directs projects studying buprenorphine in pregnancy and is the principal investigator on an NIH-funded R01 project determining how to detoxify women on buprenorphine. He also served as the PI of the MIH-funded Maternal-Fetal Medicine Units Network for 25 years.



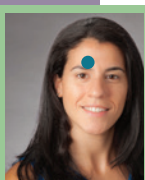
Catherine Chappell, M.D., M.Sc.

Dr. Chappell's research focuses on improving reproductive health outcomes for women living with chronic viral infections like HIV and Hepatitis C. In Pittsburgh, her team is conducting studies for Hepatitis C treatment during pregnancy. Internationally, she is evaluating dose-escalation of the etonogestrel implant in women living with HIV in collaboration with the Infectious Disease Institute in Kampala, Uganda.



Francesca Facco, M.D., M.Sc.

Dr. Facco's research focuses on understanding the impact of sleep apnea and obesity on pregnancy outcomes. She is a key investigator of the Nulliparous Pregnancy Outcomes Study: Monitoring Mothers-To-Be, which is a multicenter, prospective observational study of over 10,000 nulliparous women.



Maisa Feghali, M.D., M.S.

Dr. Feghali's research investigates individualized treatment strategies to increase treatment success and improved health of mothers with diabetes, as well as the health of their babies. Her early work identified differences in pregnancy outcomes in women with diabetes in pregnancy – she also examined predictors in treatment response and neonatal adverse outcomes in women with diabetes in pregnancy.



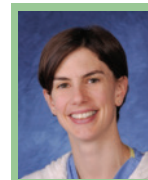
John Harris, M.D., M.Sc.

Dr. Harris strives to improve healthcare for women through understanding how healthcare systems work and using healthcare systems as a lever to reduce disparities between populations. His federally-funded research focuses on how healthcare systems struggle to provide high-quality care for women with obesity, disabilities, and severe illness.



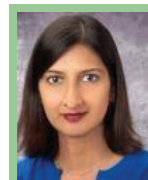
Alisse Hauspurg, M.D.

Dr. Hauspurg's research interests focus on studying the mechanisms leading to cardiovascular disease after preeclampsia. She's currently a K12 scholar in the Building Interdisciplinary Research Careers in Women's Health program funded by the National Institutes of Health Office of Research on Women's Health.



Katherine Himes, M.D., M.S.

Dr. Himes' research seeks to inform patient-provider communication to support quality decision-making, and to develop decisional support tools for preference-sensitive and preference in-sensitive decisions. She leads several maternal health research projects and serves as the medical director for the residents' high-risk obstetrical clinic.



Arun Jeyabalan, M.D.

Dr. Jeyabalan studies hypertensive disorders of pregnancy including preeclampsia. Her current research interest focuses on risk stratification and biomarkers in preeclampsia. In addition, she directs MWRI's Clinical & Translational Research Center, an outpatient facility equipped to support a wide range of clinical and translational research. The center studies sexually transmitted diseases, HIV transmission prevention, gestational diabetes, preeclampsia, and infant outcomes related to medications and breastfeeding.



“At Magee, we are committed to the health of every patient who comes through our door.”



Elizabeth Krans, M.D., M.Sc.

Dr. Krans' research examines the relationship between obstetric healthcare utilization and maternal and neonatal outcomes in women with psychosocial risk factors such as substance abuse. Her specific areas of research include improving healthcare delivery to pregnant women with opioid use disorder and improving the efficiency and effectiveness of prenatal care delivery for women with multiple psychosocial risk factors.



Jacob Larkin, M.D.

Dr. Larkin focuses on the clinical and mechanistic determinants of fetal growth abnormalities. He is an associate editor for the journal, *Placenta* and serves as the medical director for Inpatient Services at UPMC Magee.



Robert Powers, Ph.D.

Dr. Powers' lab studies preeclampsia. Occurring in one out of every 20 pregnancies, preeclampsia is the second leading cause of maternal and fetal morbidity and mortality. Dr. Powers is particularly interested in understanding how obesity increases the risk of the condition. In addition, his laboratory is studying asymmetric dimethylarginine, a novel cardiovascular risk factor, as a potential link by which obesity increases the risk of preeclampsia and cardiovascular disease later in life.



James Roberts, M.D.

James Roberts has been involved in several seminal studies of preeclampsia, including the recognition of preeclampsia involving endothelial dysfunction and differentiating it as more than pregnancy hypertension. He currently leads the Global Pregnancy Collaboration, a consortium of 34 centers worldwide that facilitates collaborative research.



Hyagriv Simhan, M.D., M.S.

Dr. Simhan's research focuses on understanding why preterm birth occurs, including investigating how maternal nutritional status influences the immune system, exploring the genetics related to preterm birth, and investigating the biology and effectiveness of progesterone in preventing preterm birth from occurring. In addition, his research examines the various roles stress, inflammation, and the physical and social environment play in pregnancy outcomes.

At Magee, we are committed to the health of every patient who comes through our door. The synergy with MWRI means we translate breakthrough research into clinical practice, benefiting patients here in Pittsburgh and around the world. Maternal mortality presents a challenge, but it's a challenge we are tackling with rigor, passion, and expertise.

Due to the international COVID-19 pandemic, some of these dates are subject to change. Please visit <https://mageewomens.org/events> for the most current event schedule.

JUNE 21-22

13TH ANNUAL NOAH ANGELICI MEMORIAL GOLF EVENT

Where: Shepherd's Rock Golf Course at Nemaquin Woodlands Resort, Farmington, PA
A full day of golf at the beautiful Shepherd's Rock Golf Course. Proceeds benefit the Center for Advanced Fetal Intervention at Magee.

For sponsorship opportunities call Jane Klimchak at 724-350-2940.

Reservations and information go to <http://noahshouseofhope.com>.

AUGUST 1

18TH ANNUAL NICU REUNION

Where: Pittsburgh Zoo & PPG Aquarium
Presented by: Giant Eagle and The Twenty-five Club

All Magee and Children's Hospital NICU graduates and their families are invited to attend. Proceeds benefit the NICU family initiatives at Magee.

For sponsorship opportunities call Denise Wickline at 412-641-8911 or dwickline@magee.edu.

Tickets on sale at bidpal.net/2020nicureunion

AUGUST 12-13

11TH ANNUAL HOME DEPOT CLAYS FOR A CURE

Where: Seven Springs Mountain Resort, Delmont, PA
Presented by: Home Depot

Team up and enjoy a day of clay shooting competition. Proceeds benefit A Glimmer of Hope Foundation in support of premenopausal breast cancer patient care and research at Magee.

For sponsorship opportunities contact Diana Napper 800-454-6746.

For more information, please visit symbolofthecure.com.

AUGUST 13-14

3RD ANNUAL PITTSBURGH PENGUINS ALUMNI ASSOCIATION "CAST FOR A CURE"

Where: HomeWaters Club, Spruce Creek, PA

Enjoy two days of relaxing fly fishing as you are teamed up with Pittsburgh Penguins Alumni. Proceeds benefit metastatic breast cancer research through the Nicole Meloche Breast Cancer Research at Magee-Womens Research Institute.

For information and sponsorships/team opportunities go to <http://mageewomens.org/events>, or contact Denise Wickline at 412-641-8911 or email at dwickline@magee.edu.

AUGUST 21

3RD ANNUAL PARS FOR POSTPARTUM DEPRESSION GOLF OUTING

Where: Birdsfoot Golf Club, Freeport, PA

Presented by: UPMC Magee-Womens Hospital and UPMC Magee-Womens Medical Staff

Full day of fun and golf to benefit the postpartum depression program at Magee.

For details and registration, go to <http://parsforpostpartum.com>, or contact Denise Wickline at 412-641-8911 or email at dwickline@magee.edu.

AUGUST 29

2ND ANNUAL IVF BABY BIRTHDAY PARTY

Where: Pittsburgh Zoo & PPG Aquarium

Supported by: Magee-Womens Research Institute & Foundation

Celebrate and share in activities with physicians and staff from UPMC Magee-Womens Hospital Oakland, Penn Hills, and Hermitage IVF programs as well as the researchers who work behind the scenes at Magee-Womens Research Institute.

For more details and to purchase tickets, go to <http://bidpal.net/ivfparty>.

SEPTEMBER 3

15TH ANNUAL SAVOR PITTSBURGH: A CELEBRATION OF CUISINE

Where: NOVA Place, Pittsburgh Northside

Savor Pittsburgh has a NEW LOCATION and a NEW PROGRAMMING twist that combines food and philanthropy for an elegant evening. Pittsburgh's finest chefs will share their favorite creations as they compete for "Dish of the Year."

For sponsorship opportunities, private space, or to purchase tickets, go to <http://savorpgh.com> or contact Christina Dickerson at 412-657-3483 or christina@dickersoncreative.com.

SEPTEMBER 17-18

9TH ANNUAL WCRC FLY FISHING CLASSIC

Where: HomeWaters Club, Spruce Creek, PA

Enjoy a two-day fly fishing competition at the amazing HomeWaters Club. Proceeds benefit the Women's Cancer Research Center's efforts to reduce the incidence and death from women's cancers.

For information, sponsorships or team opportunities, go to <http://mageewomens.org/events>, or contact Denise Wickline at 412-641-8911 or dwickline@magee.edu.

OCTOBER 21

4TH ANNUAL SEEDS OF HOPE DINNER

Where: Erie Yacht Club, Erie, PA

Enjoy a beautiful dinner and evening at the Erie Yacht Club where you will hear the very latest on world-class, women's health research being brought to the Erie community. Meet and ask questions of world class research specialists. Proceeds support women's health research in Erie.

For sponsorship opportunities, call Diane Mitra at 814-882-6677.

For tickets and details go to <https://www.hamothhealthfoundation.org/events/seeds-of-hope-fourth-annual>

OCTOBER 27

MAGEE LIVWELL SURVIVORSHIP WORKSHOP

Where: The Chadwick, Wexford, PA

Presented by: NOVARTIS

Updates on clinical treatments and research updates, as well as management of post treatment symptoms and an interactive exercise session. Concludes with relaxing networking dinner.

For details go to <http://mageewomens.org/events>. RSVP by October 20 to Denise Wickline at 412-641-8950 or dwickline@magee.edu.

NOVEMBER 8

31ST ANNUAL WOMEN'S CANCER SURVIVORSHIP BREAKFAST

Where: The Priority, Pittsburgh's Northside

Presented by: NOVARTIS

Join us for a delightful breakfast, special guest speaker, raffle and candle lighting ceremony to celebrate survivorship.

This event fills up quickly, so RSVP early by calling 412-641-4446 or emailing csdemail@upmc.edu.

NOVEMBER 19

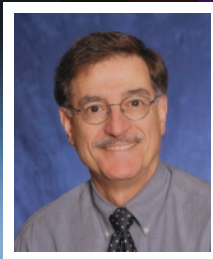
THE TWENTY-FIVE CLUB LUNCHEON PRESENTS: A TRIBUTE TO FASHION

Where: The Duquesne Club, downtown Pittsburgh

This elegant luncheon at the beautiful Duquesne Club hosts Kiya Tomlin presenting her latest fall fashions as well as exquisite holiday shopping at The Twenty-Five Club Marketplace. Proceeds from this luncheon supports newborn medicine and neonatal research at UPMC Magee-Womens Hospital and Magee-Womens Research Institute.

For sponsorships and information contact Arlene Sokolow at 412-687-5182. For more details go to <http://the25club.org/events>.

LEAVING A LEGACY: Magee Physician-Scientist Funds Research Program



By Courtney McCrimmon

"I've had an enormously gratifying career," said Steve Caritis, M.D., "The opportunity to balance patient care with clinical research has been incredible, and my hope is to pass that kind of satisfaction onto residents and fellows who care for pregnant women at Magee."

Now in his 50th year as a practicing specialist in Maternal Fetal Medicine (MFM) at UPMC Magee-Womens Hospital, Dr. Caritis has gifted \$500,000 in support of obstetrical residents and MFM fellows to explore clinical research. He hopes his gift will spur research interest in trainees so they can explore research and see if it inspires them.

"Our residents have little time to conduct research during their residency as they are often overwhelmed with their clinical work. Our MFM fellows, on the other hand, have the time and are required to undertake research as part of their training but frequently do not have access to funds to support their research. This lack of opportunity discourages trainees from considering research as a part of clinical care in their career. My goal in providing research support is to enable trainees in obstetrics to participate in research to see if it is something they would like to pursue," said Dr. Caritis.

Over the course of his career, Dr. Caritis focused on research in addition to his clinical practice. His early work focused on understanding the causes of premature birth, while his more recent work examines pharmacology as it relates to pregnant women. "Most medications taken by pregnant women have not been studied in relation to their physiology. The dose of a medication for a pregnant woman is based on research done on men and non-pregnant women. The physiologic changes in pregnancy affect every aspect of how a medication is handled by the body. Thus, dosing for pregnant women is woefully inaccurate. This commonly leads to excessive medication for some women and an inadequate dosage for other women. This is something we want to change."

Currently, Dr. Caritis directs projects studying buprenorphine and 17-hydroxyprogesterone caproate in pregnancy. Buprenorphine is used to treat opioid use disorder and may have advantages over methadone for women struggling with the condition. 17-hydroxyprogesterone caproate is a medication that may reduce the risk of preterm birth in women who experienced preterm birth previously.

"If a person is interested in clinical research, the opportunities at Magee are unparalleled," Dr. Caritis said. "Not only is the leadership - both academic and administrative - incredibly supportive, but we have incredible resources here. In addition, our patient population is diverse, and, as a referral center, Magee is a magnet for complicated pregnancy cases. This allows research studies to be done that cannot be done in smaller centers. It's a real opportunity for anyone working in obstetrics."

Over time, Dr. Caritis would like to see his gift grow through funding from Magee alumni.

"Our residency and fellowship programs are the most sought after in the country. The training provides people who chose a life in pregnancy care with the support and education they need to succeed. Our training programs have populated the field of obstetrics and gynecology and maternal-fetal medicine nationally; Magee educators, researchers, and administrators should be proud of this achievement," he said.

The gift will begin funding resident research in the spring of 2021.



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“Don’t have that stigma.”

Son raises awareness, research funding for endometrial cancers in memory of his mom

By Niki Kapsambelis

Kelly Jo Carley loved to know what was going on in her three sons’ lives. She was the fun mom, the one who never minded when their friends came over to hang out; she was always trying to tease out of them whether her sons had girlfriends and other details about their social lives. She was always up for a crowd, whether it was a family reunion or a big holiday party. She stayed close to her boys even as they grew to adulthood.

In the office where she worked, her big smile was a familiar sight; everyone knew her, because she was talkative, approachable.

But there was a subject Kelly kept to herself: the inexplicable bleeding she had been experiencing. Perhaps out of embarrassment, as the lone woman in her immediate family, she was silent.

“None of us were clued in. And it was too late once everything started happening. That’s why I want awareness out there. Don’t be embarrassed. Don’t have that stigma.”

-Shawn Carley

Around Thanksgiving 2018, she felt short of breath, but she still didn’t say anything about her symptoms until December, when she went to see a new primary care doctor. He sent her to the local hospital for some tests; that facility sent her to UPMC Magee-Womens Hospital in Pittsburgh. There, she received a startling diagnosis: Stage IV uterine cancer, with blood clots in her lungs.

“None of us were clued in. And it was too late once everything started happening,” said her son, Shawn Carley. “That’s why I want awareness out there. Don’t be embarrassed. Don’t have that stigma.”

THE SEARCH FOR ANSWERS

Kelly’s situation is all too common, according to Alison Garrett, an obstetrics and gynecology chief resident at Magee-Womens Research Institute who will be a gynecology oncology fellow next year. Busy with jobs and families and the tasks of daily life, women experience abnormal bleeding but don’t seek care, or perhaps lack insurance, and don’t find out they have cancer until it is advanced.

Garrett said she was interested in the topic because there are many opportunities to improve care and lead to better outcomes. When caught early, uterine cancer is often curable through surgery alone, although a small subset of patients will face a recurrence. To prevent that, doctors will administer radiation therapy after surgery. As doctors cannot predict which patients will recur, many patients will receive radiation, which can reduce local disease relapse, but can also create complications.

Dr. Ronald Buckanovich, Garrett’s mentor, estimates that 65,000 women face a diagnosis of endometrial cancer each year after experiencing postmenopausal bleeding. Of that number, a majority are early stage and surgery alone cures about 90 percent of these cases. But survival rates drop when women delay seeking treatment, and when it recurs, treatments are less effective, he notes. Additionally, endometrial cancer impacts African American women at higher rates, but it does not have much advocacy or funding that would help explain the disparities.

“A lot of women are dying of this disease, and when it comes back, we can’t treat them very well,” Buckanovich said. “It’s a big area of need.”

Garrett is designing a study that would look for potential biomarkers in data and tissue samples from women who have been treated for endometrial cancer in hopes of finding a signature that differentiates patients who would benefit from radiation therapy, versus those who would not benefit from radiation therapy and could be treated with surgery alone. This could help patients avoid radiation therapy and reduce side effects.

“It’s a very significant time in women’s lives when they receive this diagnosis,” says Garrett, who describes gynecologic oncology as her professional calling. “You can be there with the patient, and be there with them through one of the most challenging parts of their lives.”

RAISING AWARENESS, RAISING FUNDS

After her diagnosis, Kelly Carley underwent chemotherapy treatments, with her husband, Bill, driving her more than a 100 miles round trip each time from their house in Homer City, Pennsylvania, to Pittsburgh. Initially, she went back to work, coming home on her lunch hour to crash on the couch.

“She was worried about taking care of us,” Shawn recalled.

Kelly was at Magee for treatment during her family’s Christmas party, but she made it back in time for the actual holiday. Her husband and sons waited on her, cooking and making the holiday as special as she always had.

“The whole time, everyone felt optimistic,” says Shawn, now 31, who lives in the Pittsburgh suburb of Whitehall. “I never thought in a million years that it was terminal. I didn’t realize this would hit so close to us.”

When she resumed her chemotherapy treatments after Christmas, Kelly stayed overnight in Pittsburgh while Bill drove back and forth to see her. On Jan. 15, the family gathered in her hospital room to celebrate Bill’s 60th birthday. They surrounded the hospital bed and smiled for a photo, never realizing it would be their last.



Four days later, Shawn's phone rang at 2 a.m. It was his brother, David, speaking for their father, who was too overcome to talk. Bill had driven home from the hospital and gone to bed, only to be woken up with a call from the hospital telling him that Kelly had died. Had he known she was so close to death, he never would have left; "that should tell you how optimistic we were," Shawn said.

Eleven months later, on what would have been his mother's 56th birthday, Shawn decided to do something in her honor that would give hope to other women facing the same diagnosis: he created a Facebook fundraiser to raise money for research that will aid in the detection, treatment, and prevention of uterine cancer. He also included a link to help raise awareness of the disease and encourage women to seek treatment early.

"Even if this helps raise awareness for one person, don't hide it," he said. "Don't be embarrassed to talk about these things with your friends and family, and especially your doctor."

The fundraiser garnered \$2,650 for the type of research that Garrett and others at Magee-Womens Research Institute are pursuing. According to Buckanovich, such funding is vital, because endometrial cancer is underfunded, yet so curable.

"It was a good thing to do in her honor, I thought," said Shawn, who was overwhelmed by the support the fundraiser received. "I'm not a pushy guy. I feel grateful for everybody who contributed."

Niki Kapsambelis is a science writer for Magee-Womens Research Institute. Contact her at adlernk@mwri.magee.edu.



"Even if this helps raise awareness for one person, don't hide it." Don't be embarrassed to talk about these things with your friends and family, and especially your doctor."

-Shawn Carley

SCIENCE IS HOPE

At Magee-Womens Research Institute & Foundation, health and wellness is at the heart of everything we do, and our supporters hold a particularly special place in that heart, because you make our work possible.

Throughout the international COVID-19 pandemic, our work continues. Science is an essential business, and this virus illustrates why it's critical for us to continue expanding our knowledge and do our part to help find solutions.

Whether this issue of Magee Magazine finds you continuing to shelter in place, or slowly beginning a new normal, please continue to follow the guidelines where you live, for the health of everyone.

Science is hope, and we are dedicated to working toward a healthier future for families and communities around the world. Our research relies on your support. Below are several easy ways you can continue to support the research at Magee-Womens Research Institute & Foundation. For additional inspiration, read about some of the ways others have chosen to donate by visiting <https://mageewomens.org/patient-stories>.

Thank you so much for your continued commitment to women's health research.

Join Us In Shaping the Future of Women's Health

- Follow us on social media: @MageeWomens
- Subscribe to our mailing list: MageeWomens.org/Lets-Change
- Create a Facebook fundraiser on your birthday, for Mother's Day, Women's Health Week in May, or any day of the year.
- Designate us as your charitable organization on Amazon Smile.
- Reach out to us with your Magee story. Email us: info@mageewomens.org
- Attend one of our upcoming events: MageeWomens.org/Events
- Donate at MageeWomens.org/Support





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Making a planned gift to Magee-Womens Research Institute & Foundation, whether for research, patient care or education, is easy. This gift costs you nothing today and creates a meaningful legacy that touches the lives of so many others in the future.

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IRA

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There are many other gift options to choose from including life insurance, gifts of real estate, and gifts of stock. For more information about making a meaningful gift to Magee, please contact Laura Jacko, Major Gifts Officer, at jackol@mwri.magee.edu or 412.641.8192.