Anne M. Weber, MD, MS, directs the program on Female Pelvic Floor Disorders at the National Institute of Child Health and Human Development (NICHD), one of the National Institutes of Health. In this capacity, she provides administrative supervision and scientific input in the running of the multicenter Pelvic Floor Disorders Network (PFDN, www.pfdn.org), composed of seven academic institutions and a data coordinating center that work together to develop and perform protocols for women with pelvic floor disorders such as urinary incontinence, fecal incontinence, and/or pelvic organ prolapse. In addition, Dr. Weber interacts with investigators interested and involved in pelvic floor disorder research, providing guidance and assistance related to grant applications; and she interacts with other NIH Institutes and interested professional organizations in developing new research initiatives and agendas. One such project involves standardizing terminology for pelvic floor disorders. Recognized by the National Association for Continence (NAFC) as a 2006 Continence Care Champion, Dr. Weber is proving that cutting edge continence care does not have to involve cutting.

A graduate of the University of Maryland School of Medicine, Dr. Weber completed her residency in obstetrics and gynecology at Hartford (Connecticut) Hospital and a one-year fellowship in advanced pelvic surgery at the Cleveland Clinic, where she joined the staff in the Department of Gynecology and focused on urogynecology as part of her practice. Nurturing her interest in research, she completed a Master’s program in clinical research design and statistical analysis at the University of Michigan School of Public Health. At about the same time, leaders at NICHD decided to add a program on female pelvic floor disorders and selected Dr. Weber to be the first program officer. She continued to practice in Cleveland and later at the University of Pittsburgh Magee Women’s Hospital, Department of Obstetrics, Gynecology and Reproductive Sciences. The growth of the NICHD program soon required a full-time commitment; she left the University position and now telecommutes from Pittsburgh.

Dr. Weber’s practice and research has included the causes and treatment of incontinence and prolapse, particularly the effect of childbirth on physiology. She has found that while childbirth has a strong impact on the risk of prolapse, evidence is not as resounding for its effect on urinary incontinence — that it is influenced by other events, such as lifestyle and activity. “The rate of urinary incontinence may increase after delivery, regardless of delivery type (vaginal or cesarean section and with or
without anal sphincter tear),” Dr. Weber states. “But it usually improves in most women across all delivery groups, weakening one perceived benefit of C-sections. Looking across a woman’s entire life, the effect of childbirth as a risk factor for urinary incontinence decreases down the line. Other life factors, such as obesity, may play a stronger role. We need more basic science and translational research to better understand pelvic floor issues; otherwise, treatments are empiric rather than a consideration of the cause of the problem — for example, what exactly about childbirth impacts continence and what can be done to prevent future problems. Part of the research involves closely following patients and imaging related muscles and tissues with clarity.”

According to Dr. Weber, previous thinking centered around achieving a state of “perfect continence” and that leaking is abnormal. A more practical goal is to aim for as little incontinence as possible to keep the patient comfortable. “Episodes of incontinence are common throughout life,” Dr. Weber says. “In young, otherwise healthy athletes, for example, urinary leakage can occur with high impact exercise. Incontinence becomes important when it becomes a problem for the woman. And even though the symptoms may worsen with age, continence — not incontinence — is still the norm in the elderly.”

Because continence care crosses different disciplines and specialties, Dr. Weber is helping the move toward improved standardization of vocabulary and quantification of terms such as leakage (frequency, amount) and measurement of impact on quality of life using validated instruments. The research she oversees also involves non-surgical treatments for incontinence such as behavioral management, physical therapy programs, and the use of pessaries. She says prevention of prolapse is more difficult to study (“by the time patients seek treatment, the condition is usually advanced”) but that incontinence interventions such as pelvic floor muscle exercises (Kegel exercises) may someday prove to be part of prolapse prevention.

Dr. Weber is concerned that the surgical device industries are pushing profits over safety, with the proliferation of surgical techniques and products that are not tested sufficiently before they reach the market. “There is a huge loophole in FDA regulations where products can be marketed with literally no information on safety or effectiveness,” she says. “Once some products are released, they are found to create an unusually high number of complications, and, in some cases, the offending product is withdrawn, modified, and put back on the market — all without any FDA regulation. Sometimes the problems are discovered only after years of use, such as with a certain type of sling for stress incontinence that was ultimately pulled from the market and is now embroiled in liability litigation. Physicians need to stand firm and refuse to use products until studies to prove their safety and effectiveness have been conducted. Meanwhile, dozens of products moving on and off the market wreak havoc with study designs. Sometimes, physicians and patients want what’s new, perhaps without fully appreciating the difference between FDA regulation of drugs versus devices.”

Although she sometimes misses direct patient care, and telecommuting and uneven NIH funding present challenges, Dr. Weber is fulfilled, knowing she is contributing to the evidence base for women who so commonly have pelvic floor problems and helping them move away from thinking “this is normal” to “this can be treated.” She would like to see the Pelvic Floor Disorders Program at NICHD expand to promote more initiatives. She says this is an exciting time for this field. “People can make major discoveries that will have a real impact on understanding and application to practice and being able to prevent problems. In some areas of medicine, all the big questions have been answered. In this field, major questions have not been resolved. And there are many more patients than physicians to care for them in my scope of practice.” - OWM