The fellowship program in Female Pelvic Medicine and Reconstructive Surgery at the University of North Carolina is a three-year program approved by the American Board of Obstetrics and Gynecology. One fellow is accepted at the first year level each year. The educational objectives are:

1) To prepare the Fellows to provide excellent clinical care, medical and surgical, in the comprehensive evaluation and management of women with pelvic floor disorders, including urinary incontinence, pelvic organ prolapse, neurogenic bladder, defacatory dysfunction, fecal incontinence, and complex benign conditions such as vesicovaginal and rectovaginal fistulas and congenital anomalies.

2) To provide the fundamental research and analytical skills necessary for a successful career as an academic leader in Female Pelvic Medicine and Reconstructive Surgery and to nurture a drive towards independent scientific investigation.

3) To promote skills in teaching, curriculum development, and management essential for excellence as future educators, mentors, and leaders in this field.

The goal of the Fellowship is to train physicians to assume the role of consultant as clinicians and surgeons while promoting the academic goals of teaching and research within this rapidly advancing subspecialty. This is accomplished through a multidisciplinary team approach to patient care involving nationally and internationally recognized experts in GI Medicine, Urology, Colorectal Surgery, and Neurology. The diverse referral patient population cared for by this team allows for training in multiple surgical modalities including vaginal, abdominal, laparoscopic, and robotic approaches. In addition, the medical care offered to patients allows for advanced training in physical therapy, pain management, neuromodulation, and pharmacotherapy. This collaborative effort encourages a diverse range of clinical and scientific viewpoints and experiences.

The School of Medicine at the University of North Carolina at Chapel Hill and UNC Hospitals comprise North Carolina’s most comprehensive public center for medical care, health careers, education and biomedical research. The close association with the nationally recognized UNC School of Public Health expands the quality and diversity of opportunities available. The Department of Obstetrics and Gynecology at UNC is one of only a few departments in the nation with boarded fellowships in all 4 subspecialties. The residency program recruits outstanding physicians from across the country and is fully staffed with 7 resident physicians in each year.

UNC Hospitals has 778 licensed patient beds. The NC Women’s Hospital opened in 2002 immediately adjacent to the main building. Consultative services are available in an array of specialty and subspecialty areas. The Women’s Hospital contains the Female Pelvic Medicine and Reconstructive Surgery clinic, the Urophysiology Laboratory, the Faculty Practice Clinics and the Pelvic Pain Clinics. The Neurophysiology and GI procedures laboratories are located within the main hospital building. These facilities contain state-of-the-art equipment
for performing pertinent diagnostic studies including multichannel urodynamic evaluations, cystoscopy, anal manometry, biofeedback therapy, colonoscopy, flexible sigmoidoscopy, defecography, GI motility studies, EMG’s and nerve conduction studies. UNC Hospitals has two DaVinci robots with plans to purchase a third. One robot is currently housed in the Women’s Hospital.

Several multidisciplinary conferences are held on a monthly basis. Pelvic floor disorders conferences allow for the presentation and discussion of patients with complex conditions. Teaching conferences are held weekly including journal club and didactic seminars. Research meetings are conducted weekly. Fellows receive $2,500 annually for travel expenses. Attendance and presentations at the American Urogynecologic Society and the Society of Gynecologic Surgeons Annual Meetings are encouraged. The fellows are allowed protected research time to develop and complete their research projects and attend courses on biostatistics, research design and epidemiology.

The fellows are on-call for the gynecology service and interact closely with the resident physicians. This allows for the fellows to further develop their teaching skills.

**A major strength of the program is the diversity of experience and expertise within the faculty.**

**Catherine A. Matthews, MD** is an Associate Professor and the Division Director for Urogynecology & Reconstructive Pelvic Surgery in the Department of Obstetrics & Gynecology. Dr. Matthews joined the Department in July 2010. Dr. Matthews graduated from medical school at University of Virginia and completed her residency at the Medical College of Virginia. She joined the faculty and worked closely with Glen Hurt, MD, developing her skills in pelvic surgery and urogynecology. She is recognized internationally for her expertise in robotic surgery and vaginal surgery. On the national level, she serves as a Board Examiner for the American Board of Obstetrics and Gynecology. She has a particular interest in fecal incontinence, rectovaginal fistulae and anal sphincter injury. One of her first objectives as Division Director has been to create the "Pelvic Floor Center of Excellence" in collaboration with urology, gastrointestinal medicine, and colorectal surgery. Dr. Matthews has extensive research experience and is committed to multidisciplinary, collaborative research in the Female Pelvic Medicine subspecialty area.

**AnnaMarie Connolly, MD** is a Professor of Obstetrics and Gynecology and serves as the Fellowship Program Director. She currently serves as Acting Chief of the Division of Urogynecology and Reconstructive Pelvic Surgery. She is board-certified in Obstetrics and Gynecology and completed her fellowship in Urogynecology and Reconstructive Pelvic Surgery at the University of North Carolina. Dr. Connolly has expertise in surgical procedures for incontinence, prolapse, and fistula repair. Dr. Connolly’s extensive clinical experience covers all aspects of urogynecologic and prolapse evaluation and treatment, and includes a thorough knowledge of and familiarity with multi-channel urodynamics with fluoroscopy as well as gynecologic ultrasound including anal sphincter ultrasonography. She has significant experience with conservative treatments of pelvic floor disorders such as biofeedback with electrical stimulation, posterior tibial nerve stimulation, pessary management, and transurethral collagen injections.
Dr. Connolly’s areas of research include the effects of pregnancy and childbirth on the pelvic floor, particularly on voiding function and anal sphincteric integrity after delivery. She also has very strong interests in medical educational research. She is Director of the Education Division within our OB/GYN department, is the Residency Program Director, and serves as the Director of Undergraduate Medical Education for the Department. Dr. Connolly’s commitment to education has also been recognized by the School of Medicine and the University. She is Director of the UNC-CH Teaching Scholars Program, a monthly educational faculty development seminar series for twelve participating faculty members from the School of Medicine. On the national level, she serves as a Board Examiner for the American Board of Obstetrics and Gynecology and serves as 1 of 5 members on the Women’s Health Education Committee of APGO, is the Chair of the AUGS Education Committee, and is on the faculty of the annual CREOG Residents As Teachers and Leaders Conference.

Elizabeth Geller, MD is an Assistant Professor in the Division of Urogynecology and Reconstructive Pelvic Surgery. She is board-certified in Obstetrics and Gynecology and completed her fellowship at the University of North Carolina at Chapel Hill in 2008. She has established an expertise in robotic and minimally invasive surgery and is a member of UNC’s Computer and Robotic Enhanced Surgery (CARES) Center, where she chairs the Education Committee. She also directs the Interstim Neuromodulation Program. Her leadership roles have included being Chief Administrative Resident as well as ACOG Section Chair during her residency at the University of California at Irvine and Lead Fellow for the AUGS Fellows Task Force within the American Urogynecological Society. Her teaching excellence is demonstrated by receiving the Berlex Best Teaching Resident Award at UC-Irvine and the Fellows Teaching Award at UNC. Her research interests include short-term and long-term outcomes with robotic pelvic reconstructive surgery, clinical outcomes associated with a minimally invasive approach to anti-incontinence surgery and pelvic floor outcomes with cesarean delivery on maternal request.

Mary L. Jannelli, MD is an Associate Professor in the Division of Urogynecology and Reconstructive Pelvic Surgery. Dr. Jannelli completed a three year subspecialty fellowship in Urogynecology and Reconstructive Pelvic Surgery at UNC-CH and joined the faculty in 2002. Her research interests are outcome measures for operative procedures and parameters in evaluating lower GI dysfunctions. Dr. Jannelli has been the site principal investigator for a clinical drug trial for the treatment of stress incontinence. Dr. Jannelli serves as an active mentor to fellows on research work and projects and participates in the teaching and evaluation of the Female Pelvic Medicine and Reconstructive Surgery fellows. Dr. Jannelli is recognized by the department for her clinical administrative leadership skills and serves as the Medical Director of the department’s multi-subspecialty practice in Raleigh, North Carolina. The fellows regularly recognize Dr. Jannelli for her excellence in teaching both in the outpatient and inpatient settings.

Ellen C. Wells, MD is an Associate Professor of Obstetrics and Gynecology, the Immediate Past President for the N.C. Obstetrical and Gynecological Society and previous Chief of the Division of Urogynecology and Reconstructive Pelvic Surgery. She joined the faculty at UNC in 1993 and lead development of the Division of Urogynecology and Reconstructive Pelvic Surgery which has seen dramatic and consistent growth in research, clinical, diagnostic and surgical care volume during her tenure. Under her leadership the Division became the sixth fellowship
in Urogynecology and Reconstructive Pelvic Surgery recognized by the American Board of Obstetrics and Gynecology in 1997. The fellowship has subsequently been jointly accredited by the American Board of Urology under the new title: Female Pelvic Medicine and Reconstructive Surgery.

Dr. Wells has extensive clinical knowledge and research experience in female pelvic floor disorders including urinary incontinence, pelvic organ prolapse and lower GI dysfunction. She has specific expertise in surgical techniques, performing vaginal and abdominal reconstructive surgeries, fistula repairs, and reconstructive surgeries for congenital genitourinary anomalies. Her research has been supported by external funding from a number of sources including NIH and the pharmaceutical industry. She was a co-investigator and principal gynecologist for the UNC site of the NIH sponsored Women’s Health Initiative for 10 years and a co-investigator at the UNC site of the Pelvic Floor Disorders Network for 5 years. Other previous research areas include trials in medical management of incontinence, efficacy of biofeedback therapy, hormonal influences in post-menopausal women, and effects of childbirth and parturition on the pelvic floor. Current interest includes outcome measures for efficacy of prolapse surgeries, physical activities in women undergoing and after prolapse surgery, and alternative treatments for overactive bladder.

**William Whitehead, Ph.D.** is a Research Professor of Medicine and holds a joint appointment in the Department of Obstetrics and Gynecology. Dr. Whitehead is a nationally and internationally recognized expert in Gastrointestinal Medicine specializing in the fields of constipation and fecal incontinence. Dr. Whitehead has served as a site Co-Principal Investigator to the Pelvic Floor Disorders Network. He is coordinator of the rotation in the GI Procedures laboratory and serves as an active research mentor to the Fellowship. He has a primary interest in defecatory dysfunction and fecal incontinence, and behavioral and biofeedback therapy for functional gastrointestinal disorders. His expertise includes anal manometry and anorectal biofeedback therapy. Dr Whitehead actively participates in the monthly Pelvic Floor Disorders Conferences.

**Linda Van Le, MD and John Soper, M.D.** are the Co-Directors of the Division of Gynecologic Oncology. Both Dr. Van Le and Dr. Soper have extensive experience in complex pelvic surgery as well as expertise in complex pelvic reconstruction, gastrointestinal, and genital-urinary procedures. Areas of expertise include large and small bowel procedures, ureteral anastomosis and reimplantation, and urinary diversion procedures. Dr. Van Le and Dr. Soper are also nationally recognized researchers, educators, and mentors in the subspecialty of Gynecologic Oncology and have served as exceptionally strong supporters of the Female Pelvic Medicine/Reconstructive Surgery fellowship program both at the local and national levels.

**Raj S. Pruthi, MD** is Associate Professor of Surgery/Urology and Director of Urologic Oncology at the University of North Carolina at Chapel Hill. He also serves as disease group leader for the Genitourinary Oncology Program at the NIH-sponsored Lineberger Comprehensive Cancer Center at UNC. His clinical and research interests are in urologic oncology including bladder, kidney, and prostate cancer. He has contributed over 100 peer review publications in these areas. Additional interests include minimally invasive treatments for urologic malignancies, such as laparoscopic and robotic approaches, and evaluation of their role in urologic oncology. Basic science research interests include the study of inflammatory pathways in the development
and treatment of urologic cancers. Dr. Pruthi is currently a member of the American Urologic Association’s Committee for Guidelines on the Management of Non-muscle Invasive Bladder Cancer, the American College of Surgeons Advisory Panel for Urology, and the Board of Directors for the Southeastern Section of the American Urological Association.

Kristen Borawski, M.D is a Urologic Surgeon completing her Fellowship and Residency at Duke University Medical Center in Durham in June 2010. A graduate of Albany Medical School, she is widely published. She is will join UNC-CH Urology Surgical as an Assistant Professor and Director of Urodynamics on August 1, 2010. She has expertise in Female Urology, Reconstructive Urology and Neurourology.

Timothy Sadiq, MD is a certified Colorectal Surgeon recently completing his Fellowship from The Lahey Clinic in Massachusetts. He joined the UNC-CH GI Surgical Division on August 1, 2007. He completed his Surgical Residency at UNC-CH and served in the capacity of Administrative Chief Resident. His interests include complex anorectal disorders, transplantation and stem cell research. He has received several Chief Resident Awards and has served on Medical Student Education and Organ Donation Initiative Committees.

Wendy R. Brewster, MD, PhD is the Director of the Center for Women’s Health Research. The mission of the CWHR is to improve the health of women through multidisciplinary research, education and advocacy through the development of researchers and community partnership. Dr. Brewster is also an Associate Professor in the Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, School of Medicine, and an Associate Professor in the Department of Epidemiology, School of Public Health. Dr. Brewster is a population scientist with a research interest in early detection and prevention of gynecologic malignancies. Dr. Brewster’s academic interests are also in the areas of gynecologic oncology and cancer epidemiology. Dr. Brewster is a clinically active member of the Gynecologic Oncology Division in the Department of Obstetrics. Dr. Brewster received her medical degree from the Geffen School of Medicine at UCLA and completed residency in Obstetrics and Gynecology at Harbor-UCLA Medical Center. She then completed her GYN Oncology Fellowship and PhD with an emphasis in cancer epidemiology at the University of California, Irvine.

John Thorp, MD is subspecialty certified in Maternal Fetal Medicine and is the Director of the Division of Women’s Primary Care. He has particular expertise and interest in the relationship amongst pregnancy, delivery, and postpartum time period. These research interests focus on both immediate as well as long-term outcomes related to urinary, fecal, and pelvic floor dysfunction. He is recognized nationally and internationally for his excellence in clinical research and has many active research roles serving as, among many other research leadership roles, as the UNC site Principle Investigator to the Maternal Fetal Medicine Network. Dr. Thorp is also an educational leader within the department and has received the Resident Teaching Award three times. He is the Deputy Director of the Center for Women’s Health Research.

John Steege, MD is board-certified in Obstetrics and Gynecology and is the Director for the Division of Advanced Laparoscopy and Pelvic Pain. Dr. Steege is nationally and internationally recognized for his work on pelvic pain and sexual dysfunction. He coordinates the Pelvic Pain Clinic, in which Fellows rotate, which is multidisciplinary and includes physicians in
Neurology, Anesthesia, Psychiatry, and Gastrointestinal Medicine. Dr. Steege’s clinical and research experience adds tremendous depth and diversity to the Fellowship program with his expertise in pain evaluation and management as well as laparoscopic and robotic surgery.

Other University of North Carolina faculty who are directly involved in fellowship training are:

James F. Howard, Jr. M.D.  
Professor, Neurology, and Medicine  
Certified in electromyography and electrodiagnosis.  
Special interests: Clinical neurophysiology, neuromuscular physiology.

Julia Fielding, M.D.  
Associate Professor, Radiology  
Chief, Abdominal Imaging.  
Special interests: Uroradiology, MRI of the Pelvic Floor

Mark Koruda, M.D.  
Associate Professor, Gastrointestinal Surgery.  
Special interests: GI surgery, critical care, and nutrition and metabolism.

Yolanda Scarlett, M.D.  
Associate Professor, GI Medicine  
Director, GI Procedures Laboratory.  
Special interests: Motility disorders, fecal incontinence and constipation.

Jan Busby-Whitehead, M.D.  
Associate Professor, Medicine, Program on Aging.  
Special interests: Geriatrics, Incontinence in the elderly.

In summary, the Female Pelvic Medicine and Reconstructive Surgery Fellowship program at the University of North Carolina at Chapel Hill provides exceptional, multidisciplinary educational opportunities to fellows and prepares them for a career in clinical and academic medicine. This is accomplished through a multidisciplinary team approach to patient care involving nationally and internationally recognized experts. The diverse referral patient population cared for by this team allows for training in multiple surgical modalities including vaginal, abdominal, laparoscopic, and robotic approaches. In addition, the medical care offered to patients allows for advanced training in physical therapy, pain management, neuromodulation, and pharmacotherapy. This collaborative effort allows for a comprehensive training experience in the evaluation and treatment of complex pelvic floor disorders and encourages a diverse range of clinical and scientific viewpoints and experiences.