UNC CENTER FOR FUNCTIONAL GI & MOTILITY DISORDERS
CLINICAL SERVICES

REACHING OUT,
EXPANDING KNOWLEDGE,
OFFERING A RAY OF HOPE
MISSION STATEMENT

To advance the biopsychosocial understanding and care of patients with functional GI and motility disorders through research & education.
The UNC Center for Functional GI and Motility Disorders (FGIMD) has a 15 year history in the Biopsychosocial knowledge and care of patients with FGIMDs with initiatives in the area of research, patient care, training and patient education.

The clinical program provides multidisciplinary patient centered care involving gastroenterologists, physiologists, psychologists and physician assistants.

Emphasis in clinical training is placed on advanced interview methods and relationship building to maximize effective provider to patient interactions and the use of newer gut-directed and psychopharmaceutical agents.

Clinical services are closely linked to our internationally recognized research program and involve psychosocial and psychophysiological investigation, epidemiology and treatments for patients with FGIMDs.

Availability is provided for on-site training of students, trainees and established clinicians and investigators to gain advanced skills in patient care and clinical research.

This world recognized clinical program of the UNC Center relies on external funding to maintain its high quality services.
Brief Overview of the Center

The UNC Center for Functional GI and Motility Disorders began in 1994, when Dr. William Whitehead moved from Johns Hopkins University to the University of North Carolina Division Of Digestive Diseases and joined Dr. Douglas Drossman. Prior to that, Dr. Drossman had an active clinical practice in IBS and the functional GI and motility disorders as well as a biopsychosocial research program related to clinical and psychosocial outcomes in the FGIMDs. Dr. Whitehead, who had established a research and biofeedback treatment program for motility disorders at Johns Hopkins with Dr. Marvin Schuster, was recruited to set up what has become a world-class motility program at UNC. Drossman and Whitehead combined their skills and expertise in the effort to establish a research and clinical program that was committed to the field of functional GI and motility disorders. Further information about the Center can be found elsewhere in our annual reports and publications. The Center’s mission was implemented through four areas of activity:

1) Patient Care – to offer state of the art evaluation and treatment for the full range of functional GI and motility disorders,

2) Research – to conduct studies on the physiological and psychosocial mechanisms underlying functional GI and motility disorders, their impact on quality of life and health outcomes, and their treatment,

3) Training – to provide multidisciplinary training and education in clinical and research skills with an emphasis on patient centered care and advanced research methods,

4) Patient Education – to provide helpful and updated information through seminars and workshops as well as printed materials, videos and the internet. This brochure specifically addresses the clinical services relating to patient care and training provided by the Center.
Center Structure & Clinical Services

One of the most unique features of the Center involves Drs. Drossman and Whitehead’s shared responsibility as co-directors, and this collaboration between two senior academicians has sustained the program for over 15 years. Dr. Drossman coordinates the clinical activities, Dr. Whitehead established the motility program, and both have active research programs with independent and shared federal, foundation and pharmaceutical support. In addition, several new faculty and investigators have joined the Center and added to the clinical program and have also established careers in clinical research. The Center also opened its doors to provide preceptorships and other educational experiences for students, physicians and psychologists interested in biopsychosocial care. We have also recruited a larger administrative staff to coordinate day to day activities including visiting scholars, media development, website maintenance, and the production of teaching tools, and established data management and biometry cores to provide advanced clinical and website based research and data analysis.

Clinical Program Components

Patients come from all over the United States, and other countries to benefit from the Center’s unique biopsychosocial approach to understanding and treating FGIMDs. Listed below are the components of this program.

Clinical Care Services

Functional GI and Motility Disorders Clinic. Established and directed by Dr. Douglas Drossman, the Functional GI and Motility Disorders Clinic at UNC Hospitals is the premier site, both nationally and internationally, for referral of patients with functional GI and motility disorders (FGIMD’s). The clinic’s unique multi-disciplinary, patient-centered approach integrates medical, physiological and
psychological factors in the evaluation, understanding and treatment of patients with these disorders. The clinic also serves as a leading tertiary referral site for patients who have difficult-to-diagnose illnesses or challenging disease/disorder management issues. Dr. Drossman sees patients usually referred by gastroenterologists who have complex or difficult to diagnose or manage functional GI and motility disorders. Because his wait list for an appointment is six months, Dr. Drossman is assisted by two physician assistants. Chris Dalton, PA-C has worked as Dr. Drossman’s PA for the past 12 years and Lynn Eckert, PA-C who was more recently hired, to meet the demand of our increasing referrals. We are also fortunate to have two gastroenterologists currently on sabbatical at UNC who also see patients referred to our center under Dr. Drossman’s supervision: Joseph Zimmerman MD from Hadassah Hospital in Jerusalem, Israel and Reuben Wong MD from Singapore. In addition 3 Center faculty gastroenterologists provide additional support: Dr. Ryan Madanick specializes in seeing patients with functional esophageal disorders, Dr. Yehuda Ringel sees patients with functional upper GI symptoms and/or complicated motility disorders, and Dr. Yolanda Scarlett sees patients with functional anorectal disorders. Drs. Ringel and Scarlett are assisted by Danielle Maier, PA-C MA who also sees patients on her own. Finally, the clinic is also staffed with a Fellow (gastroenterologist in training), who is supervised by Dr. Drossman and Dr. Ringel. The Center’s clinical personnel are also routinely involved with consulting on patients at UNC Hospitals with severe functional GI or motility disorders and with physicians who call for advice regarding their patients.

GI MOTILITY PROGRAM

The GI Motility Program at UNC Hospitals was established by Dr. Whitehead. Diagnostic evaluations and clinical care are now managed by Dr. Yolanda Scarlett (Medical Director), Dr. Yehuda Ringel, and Danielle Maier, PA, for lower GI motility disorders, and Dr. Nicholas Shaheen (Medical Director), Dr. Doug Morgan and Dr. Ryan Madanick for swallowing disorders and ambulatory pH testing. Sheila Crawford, RN, is the head nurse for the UNC Hospitals GI Motility Lab, and Jill Williams, RN,
also performs diagnostic testing in the Laboratory. Patients with GI motility disorders may be seen initially in the Functional GI and Motility Disorders Clinic (see above), or they may be referred directly to the medical staff of the GI Motility Lab if referring physicians anticipate that diagnostic motility testing or biofeedback training will be needed. Diagnostic motility tests may be scheduled directly by outside physicians, but a medical consultation from one of the clinicians affiliated with the GI Motility Lab is recommended. The following services are provided by the GI Motility Lab:

- Diagnostic anorectal motility tests for fecal incontinence, constipation or rectal pain
- Ambulatory pH and impedance testing
- Esophageal motility testing
- Hydrogen breath tests for small bowel bacterial overgrowth and carbohydrate malabsorption
- Breath tests for H. pylori infection
- Smart Pill® for ambulatory testing of GI motility

A new service also provided is the electrogastrogram (EGG). This clinical and research tool provides information on the electrical activity of the stomach and is helpful for evaluating patients with nausea, dyspepsia, vomiting and other functional GI and motility disorders that involve the stomach.

PELVIC FLOOR BIOFEEDBACK CLINIC

A state of the art pelvic floor biofeedback clinic is directed by Steve Heymen, PhD. Appropriate referrals for this clinic are patients with fecal incontinence or dyssynergic defecation (a form of constipation in which the patient has difficulty emptying the rectum). Angel Moore, NA, assists Dr. Heymen in this clinic.
PSYCHOLOGICAL SERVICES

Charles K. Burnett, PhD, Clinical Associate Professor of Medicine, and Stephan Weinland, PhD, Instructor of Medicine, provide psychological services to the Center and Division of Gastroenterology and Hepatology. Patients are referred to the two psychologists from the Functional GI and Motility staff, divisional staff and by outside physicians. When the medical evaluation of a patient visiting the FGIMD Clinic suggests that psychological evaluation and/or treatment that could include pain management or psychological treatments would be beneficial, Drs. Burnett or Weinland or a psychology intern working with them is brought into the patient’s overall care. This is consistent with our biopsychosocial multi-disciplinary team approach. Drs. Burnett and Weinland specialize in the treatment of patients with chronic gastrointestinal illnesses, using one or more of the following techniques or therapies:

STRESS MANAGEMENT
Stress management therapy seeks to help a person understand the role of stress in his/her life and how it relates to the person’s FGIMD symptoms. It also seeks to provide the patient with a variety of ways for dealing with stressful events in ways that minimize their impact on the person’s FGIMD symptoms and quality of life.

COGNITIVE BEHAVIORAL THERAPY (CBT)
CBT focuses on the interrelationship between a patient’s thoughts, actions, and feelings, and the role they play in their FGIMD symptoms. A common example is to reverse the “vicious cycle” that occurs when chronic symptoms lead to psychological distress which can worsen the symptoms. By focusing on the psychological components of the “brain-gut axis”, changes are made in how a patient perceives his/her GI difficulties, and it may help reduce the frequency and intensity of FGIMD symptoms.
**RELAXATION THERAPY**

Relaxation therapies to reduce a person’s current state of physical and psychological activation include progressive muscle relaxation (PMR), autogenic training, breath regulation, and meditation. With these techniques, a person can learn how to “turn down the volume” on their GI symptoms by becoming more calm and relaxed about them.

**HYPNOSIS**

Hypnosis or hypnotherapy makes use of guided imagery and relaxation techniques to achieve a state of highly focused attention and openness to health promoting suggestions from the therapist. This can be accomplished with the help of a therapist or by oneself (self-hypnosis). Hypnotherapy has been shown to reduce the frequency and severity of FGIMD symptoms and also the number of comorbid symptoms such as fibromyalgia and headaches that IBS patients frequently experience.

**PATIENT CARE AND EDUCATIONAL CONFERENCES**

Our patient care and educational conferences provide a unique forum for optimizing patient care and fulfilling our educational mission. The conferences involve case presentation and discussion among a multidisciplinary staff involved in functional GI and motility.

**CLINICAL CASE CONFERENCE**

The Clinical Case Conference is held every Thursday morning in the FGIMD Clinic. Clinicians have the opportunity to present difficult cases and exchange ideas regarding patient evaluation and treatment. Participants in the Clinical Case Conference address the physical, social and psychological factors that are relevant to a
specific case, utilizing the group’s overall expertise to maximize the impact on patient care. Decisions made at the conference can have significant impact on the overall care of patients referred to the Center. This weekly forum also provides a learning opportunity for resident fellows, investigators, and others interested in the clinical aspects of caring for patients with functional GI and motility disorders.

**Evening Clinical Skills Seminar**
For over 30 years Dr. Drossman has facilitated a unique monthly program in clinical skill development based on a biopsychosocial patient-centered approach to diagnosis and care of patients with FGIMDs. The program evolved from the work of Drs. George Engel and Karl Rogers. Dr. Drossman’s patient interview and educational facilitation style is highly regarded and professionals in medicine and allied health fields visit the center to learn these techniques. This seminar features interactive learning methods including videotaped discussions, role playing, small group learning and live interviews with patients. The seminar is unique in its active participatory style and the methods have been presented at national meetings and described in professional journals and magazines.

**Pelvic Floor Disorders Conference**
The Pelvic Floor Disorders Case Conference is held monthly and is central to the training, patient care and research objectives of the GI Motility Service. The format for the conference is a discussion of cases that have been seen by the gastroenterology and urogynecology services, focusing on cases that present complex decision making about patient care or important teaching points. There is also discussion of whether certain patients are appropriate for referral to one of the ongoing research studies at the Center. The conference also provides an opportunity for updates on new publications, research conferences, and new research initiatives.
The clinic often has visiting gastroenterologists and trainees from other states and countries who are interested in learning more about the clinical approach, diagnosis and treatment of FGIMD patients. They also learn how to improve their interviewing and patient skills (see Visiting Scholars). Medical students, residents, psychologists, gastroenterologists in training or on sabbatical are all afforded the opportunity to learn interview techniques, motility, biopsychosocial care and advanced pharmacological treatment using new and experimental medications. In particular, the Center is the first to apply combined augmentation treatment using GI and psychotropic agents in the care of patients with refractory functional GI disorders. There are several ways in which individuals come to learn at our Center:

**Visiting Scholar Program**

Individuals can visit the Center for a short stay of several days to several weeks. By hosting visitors from around the US and the world the Center benefits from a unique opportunity to share and exchange ideas on treatments for functional GI and motility. For the duration of their stay at the Center, visiting scholars have access to expert gastroenterologists, psychologists, motility experts and physiologists. Visiting scholars may observe patient care directly, attend teaching conferences and if the stay is long enough, obtain a temporary license to see patients on their own with Center staff supervision.

**American Neurogastroenterology and Motility Society (ANMS) Fellowship**

Since 2007 our Center has been a recipient of the ANMS visiting fellowship award and host three gastroenterology fellows a year from around the country. The visitors are able to observe or directly care for patients in the clinic, learn motility with all our Center staff, and develop supervised case presentations. The goal of this program is to encourage gastroenterology trainees to enter a career in functional GI and Motility.
Gastroenterology Fellowship in Functional GI and Motility

Over the years, our Center has trained several GI fellows who have gone on to establish careers in academic gastroenterology (Yehuda Ringel MD, Albena Halpert MD, Greg Austin MD, and Spencer Dorn MD). We are now fortunate to have funding from McNeil Pharmaceuticals for AGI. This fellowship involves two years in research at our Center and two years in clinical training in our Division of Gastroenterology and Hepatology. The fellow will begin in July 2009 and we are actively recruiting for a second fellow to begin in July 2010.
In the current health care environment, quality of care is rapidly being replaced by a cost-based model which may compromise patient care and training, and produce dissatisfaction among clinicians seeking to develop a career in the functional GI disorders. Our center promotes the highest quality of biopsychosocial care and training, yet we are unable to sustain these services due to decreased patient care reimbursements. Furthermore, we do not order unneeded high cost technical services (e.g., endoscopy) sometimes used to generate income when not clinically necessary for the patients. As reported by Jane Brody, science writer in the NY Times Health Section (9/30/08):

“Even some salaried academic physicians like Dr. Douglas A. Drossman, who runs a respected clinic where patients are treated regardless of ability to pay, often have to scramble for grants from foundations and industry to support their work with patients. Dr. Drossman, co-director of the Center for Functional Gastrointestinal and Motility Disorders at the University of North Carolina, said the salaries he and his colleagues receive do not cover the program’s costs. The program treats patients with life-disrupting chronic conditions like irritable bowel syndrome, many of them referred by other diagnostic centers like the Mayo Clinic.”

It is becoming increasingly difficult to maintain our quality of care model without ongoing external support. We are hopeful that we can maintain these activities through the generous support of our sponsors.

**Reference List**


The UNC Center for Functional GI & Motility Disorders would like to thank

**S&R Foundation**

for their generous support of our Clinic Program

We would also like to thank our other Center Sponsors: Sucampo Pharmaceuticals, Procter & Gamble Company, McNeil Pharmaceuticals, AstraZeneca Pharmaceuticals, Salix Pharmaceuticals, and Prometheus Laboratories
The Clinic offices for the UNC Center for Functional GI & Motility Disorders require a referral from your physician’s office prior to a patient visit.

If you would like further information on our services or to have your physician’s office schedule an appointment, please call Linda Miller at (919) 966-0141

For appointments in the Clinic with Dr Drossman and Dr Ringel, or Physician Assistants Dalton, Eckert and Maier, please call Linda Miller at (919) 966-0141

For appointments in the Motility Clinic with Dr Scarlett, Dr Shaheen, Dr Morgan, Dr Madanick and Dr Ringel, or Physician Assistant Maier, or Crawford RN and Williams RN, Call (919) 966-5599

For appointments in Psychological Services with Dr Weinland and Dr Burnett, please call Linda Miller at (919) 966-0141