

Functional Brain-Gut Research Group



The mission of the Functional Brain-Gut Research Group is to support, promote and advance multidisciplinary research and education in the basic science, clinical and behavioral aspects of brain-gut interactions.



George F. Longstreth
President

Message from the President

At the half-way point as President, I would like to update FBG members on some of our important issues. In addition, I would like to acknowledge the work of some of the people who work hard on our activities.

Membership Dues — The most important current matter is member financial support of the organization. As permitted in the By-Laws, we have included many people on the Newsletter mailing list who pay no dues, and we have also sent them ballots for voting on FBG officers. FBG acquired a new member benefit and financial responsibility when we became a co-sponsor for Neurogastroenterology & Motility. The current subscription cost is about \$120 annually per member. Although we expect to share this cost with the AMS and ESNM for people with multiple memberships, such members comprise a minority of FBG members, and the cost of paying partial or full subscriptions for people who do not pay FBG dues seems unjustifiable to the elected officers. In addition, the fixed costs and many advantages of FBG membership -- the content of this Newsletter should leave no doubt about this -- warrant a fair dues payment. Our dues of \$50 cover only a small part of our total costs (we obtain the rest of our operating budget from corporate sponsors), and this is a reasonable amount to expect from members. Therefore, we now require members to pay dues in order to receive the journal.

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Founded 1989



Douglas Drossman

Functional GI Disorders: What's in a name?

Douglas A. Drossman, MD, Editor

A few months ago, when the 28 chairs and co-chairs of the Rome III committees convened, part of the agenda pertained to whether the designation "Functional GI Disorders (FGID)" should be abandoned. Although many recognized the negative connotations attributed to the term, there was no consensus on an alternate designation. Eventually, a referendum of all 90 committee members led to a decision to retain the term "functional".

Does it really matter what we name these disorders? Perhaps the important question is what makes the term "functional" so different from "organic" and, based on newer scientific developments in the field (1), why do we even retain these distinctions?

To answer these questions, it is important to look historically at how societal beliefs relate to illness and disease¹ and, in particular, how psychosocial factors contribute to these beliefs. Societal beliefs or explanatory models about human illness change, depending on the existing "folk" models of the time (3). They can influence the nature of scientific inquiry and the conclusions drawn from the data. Examples include the Curandero in Hispanic culture, shamanism in Native American cultures, and even biomedicine (i.e., the high value placed on objective pathological states to explain human illness) in modern western medical culture. This last example of biomedicine is interesting because, for an extended period of time -- in fact throughout most of Western recorded history -- illness was understood from a "holistic" (Greek - "Holos") perspective. As proposed in rudimentary form by the ancient Greeks (4), holism reflected the notion that mind and body are inseparable;

1. We define disease as observable pathological abnormalities and illness as the person's perception of ill health (2).

Message from the President — from page 1

Earlier this year, the officers sent a letter to people on our membership list who had not paid 2005 dues, and it resulted in a substantial increase in dues payments. If you have not paid your dues, I urge you to do so. The journal, Newsletter, Membership Directory, annual meeting at DDW, opportunities to contribute to symposia and DDW sessions, professional and social interaction, and other benefits are some of the many reasons we should support FBG with our dues and encourage others to join the organization. See our website (www.fbgweb.org) for information.

Official Journal — Kevin Olden and Lesley Houghton are working with AMS and ESNM representatives on management issues related to Neurogastroenterology & Motility. Its broadened content should appeal to our diverse membership and readers outside of the sponsoring societies.

Membership — Max Schmulson, Chair of the Membership Committee, suggested we have membership certificates, and we intend to send them with this newsletter to people who are current with their dues.

DDW Abstract Session — Our abstract raters determine the quality of our DDW sessions. This year, they were: [1] Psychosocial & Psychotherapeutics — Bill Whitehead (Chair), Lynn Walker, Rona Levy and Yehuda Ringel; [2] Symptoms, Epidemiology & Validation — John Kellow [Chair], Jan Irvine, Adil Bharucha and Margaret Heitkemper; and [3] Pharmacotherapeutics — Fernando Azpiroz (Chair), Stefan Muller-Lissner, William Chey and Filippo Cremonini.

Newsletter — The Newsletter production remains in North Carolina with Doug Drossman as Editor. This is the second issue in colorful, artistic format. Kirsten Nyrop and John Herr assist Doug.

Joint Meetings — Rick Locke is helping to plan the 20th International Symposium on Neurogastroenterology & Motility to be held July 3-6, 2005 in Toulouse, France. Rick is also working with representatives of the AMS, ESNM and IMG on the 14th Biennial Joint Meeting to be held September 14-17, 2006 in Boston.

Young Investigators' Forum — Due to the efforts of Rona Levy and Lin Chang, our March meeting for fellows in southern California was very successful. The fellows' research presentations were interesting and generated active discussions with the faculty (Rona, Lin, Bill Chey, Ray Clouse, Doug Drossman and Arnold Wald). Faculty presentations covered important issues in career development that are often not addressed in training programs, and the fellows clearly benefited. Unfortunately, a snowstorm stranded two Mayo fellows, Mike Camilleri and Deb Geno in Rochester -- next time we should hire a weather consultant to help us pick a time when the Minnesota climate might allow people to leave! The number of abstracts submitted this year increased. I urge members to start telling fellows now about this meeting, so they can think about submitting their work next year.

Cross-Cultural Issues — Charles and Mary-Joan Gerson are recruiting members of a new committee to address cross-cultural aspects of GI disorders, and we look forward to the fruits of their work.

Office Relocation — The transfer of our administrative and accounting activities from North Carolina to Minnesota is complete. We owe this to the untiring efforts of our Executive Director, Deb Geno.

It is a pleasure to work with the many people dedicated to the continued success of our organization.

medical disease must take into account the whole person rather than just the diseased part. This concept still reverberates within existing medical beliefs in Eastern and other non-Western societies, and it existed in Western medicine for thousands of years.

Beginning about 350 years ago, certain changes set the stage for a “paradigm shift”² away from holism toward the acceptance of biomedicine as the disease model. In 1637 in Europe, Rene Descartes (6) proposed the separation of the thinking mind (*res cogitans*) from the body (*res extensa*). Perhaps this dualistic concept took hold because it harmonized with existing sociopolitical influences relating to the separation of Church (the spirit) and State (the body), making holistic concepts less acceptable. When applied to the medical field, this Cartesian dualism changed scientific thinking and practice. It now permitted the previously restricted ability to dissect human cadavers (since the spirit was no longer believed to reside there), thus creating a pathologically based model for disease, i.e., what was seen (later considered “organic”) represented true disease. However, this biomedical, pathologically based model also dismissed patients with psychiatric (“functional”) problems as having behavioral disorders (or at the time, possession by evil) that could not be seen or understood. Such patients were relegated to the asylums, and not considered amenable to scientific investigation. This fundamental change in the concept of illness and disease beginning over 3 centuries ago has continued to influence modern attitudes and behaviors, in particular by placing secondary value on the understanding, teaching and investigation of non-pathologically based (i.e., functional) disorders in all areas of medicine. It has also contributed to the negative attributions held toward patients having functional disorders; with no observable disease, their illness is considered less legitimate, psychiatric, or even questionable.

Closely related to biomedical dualism is the concept of reductionism, i.e., the relegation of diseases to single etiologies that are both necessary and sufficient to explain the illness (also called linear causality). This is represented by Koch’s “germ theory” and has been important in understanding acute infectious disease. But, it has its limitations with regard to chronic disease that is multidetermined. The retention of this concept was recently demonstrated by one notable investigator who said: “Psychological issues are important, but finding the etiology (of IBS) will take care of the problem.” This

person’s attention to the importance of psychological factors is reasonable, although the conceptual understanding is both reductionistic and dualistic.

Despite efforts by many scientists over the last 3 centuries to reintroduce a more integrated understanding of mind and body, biomedical concepts have for the most part held ground in Western society. However, beginning in the late 1970’s, research began to show the limitations of biomedical reductionism and dualism, thus setting the stage for another paradigm shift in medical thinking. Several trends emerged: (a) A disconnect was found between illness and disease; many patients went to doctors with illnesses such as headache, fatigue, dizziness or abdominal pain, that was not easily explained by disease (7). (b) Patients with identifiable disease, such as IBD or ulcers, could vary in their illness expression from asymptomatic to severely disabled, despite comparable objective findings. (c). Research was also showing that psychiatric disorders considered “functional” had genetic determinants and biochemical correlates. (d) Even in the area of infectious disease, the reductionistic germ theory of illness came into question; chronic infectious diseases, like tuberculosis or HIV, were now seen as conditional etiological agents that required environmental influences on host resistance or social precipitating factors to bring the condition to full clinical expression. Thus, it was becoming more and more difficult to accept the concept of reductionistic causality when biological and social heterogeneity existed in the clinical expression of chronic disorders. In effect, science is now showing that organic disease has “functional” components and functional disorders have organic components, a recent example being the finding of mucosal inflammation and immune dysfunction in a subgroup with IBS.

By 1977, the time may have been ripe for a new “Biopsychosocial Model” (8,9) to take hold -- another paradigm shift from biomedical reductionism and dualism to one of multi-causality with the integration of mind and body. A series of papers by George Engel offered a modern exposition of holistic theory, proposing that illness is the product of biological, psychological and social subsystems interacting at multiple levels. Instead of considering any one factor as etiologic, Engel proposed that it is the interaction of these subsystems that determines the illness and disease. This model provided not only the framework for reconciling emerging research findings that were not amenable to a strictly biomedical approach, but

2. As introduced by Thomas Kuhn in “The Structure of Scientific Revolutions”(5), a paradigm shift involves a break from the constraints of existing thought which then allows the individual to “see” the composite picture in another way. Here, the concepts of Descartes -- distinctly different from prior more holistic concepts -- harmonized with societal changes leading to the separation of church and state, thus permitting biomedical dualism to rapidly and completely take hold in scientific thinking.

it also explained the heterogeneity of medical illness and the uniqueness of its clinical expression.

Yet, it takes a long time for conceptual schema to change and the biomedical model is still alive and well. About 20 years ago, we surveyed a random sample of 704 members of the AGA in order to obtain the frequencies of various GI disorders in practice and the attitudes and beliefs of gastroenterologists towards the functional GI disorders (FGIDs) (10). We found that the FGIDs comprised 41% of GI practice and next came IBD (28%). Interestingly, this finding did not change in a follow-up survey 15 years later, although the prevalence of peptic ulcer disease had decreased and liver disease had increased due to the discovery of *h. pylori* and hepatitis C, respectively (11). We also found that the most frequent endorsement for the definition of functional was "a disorder with no known structural (i.e., no pathological or radiological) abnormalities, or infectious or metabolic causes" (81%). Next came the definition of a "stress-disorder" which was more frequently endorsed by private practitioners (57%) than academicians and trainees (34%), and last was the definition of "motility disorder" by 43% practitioners and 26% academicians/trainees (11). Psychosocial factors were believed to affect the etiology and pathogenesis of IBS but not of IBD. These findings tell us that the FGIDs are the most common disorders seen in GI practice. They are still understood from the Cartesian concept as the absence of organic disease and with stress as an etio-pathological factor. Furthermore, the inability to conceptualize these conditions as "real" leads to a derogation of the patient.

These types of findings exist worldwide. Table 1 summarizes the results of a convenience survey, where I asked gastroenterologists around the world who are involved with the FGIDs about the meaning of the term functional GI disorder to physicians and patients in their respective countries. While this is hardly a scientific study, I found that with only a few exceptions (e.g., Japan and Hungary define it as gastrointestinal dysfunction), the meaning to physicians and patients is that of a psychological disorder or the absence of organic disease, and with pejorative features toward the patient.

In a recent study by our group of GI fellow and patient attitudes that was focused on night and weekend phone calls to the on-call fellow, we found considerable disparity between physician and patient views about functional GI disorders (12). The patients who called in felt their requests were reasonable due to disabling symptoms, they liked the doctor on call, and believed the recommendations they received were helpful. By contrast, the on-call fellows did not feel the patients were terribly disabled or that the requests were reasonable, they

did not think their own medical recommendations were helpful, and they did not like the patients as much as the patients liked them. When the physician responses were analyzed with regard to whether the patients had a functional or organic diagnosis, we found that those with FGIDs were associated with the more negative attitudes, significantly more than those with organic disease. This disparity is in striking contrast with data showing that the health status of patients with FGIDs -- in terms of pain severity, health care visits, quality of life, psychosocial distress, and even frequency of operations -- is more severe than patients with organic disease (13).

Modern science is moving us away from biomedical reductionism and dualism towards a more appropriate biopsychosocial model of illness and disease. However, despite the evidence, the attitudes and behaviors of patients and physicians within our society are still by-and-large entrenched in the biomedical model. While the functional GI disorders fit well within a newer and better understanding that brings legitimacy to the disorders and to the patients who suffer from them, the FGIDs remain "orphans" in the still-prevailing biomedical model.

So, the question about the need for a name change and the inability to find a good substitute remains. What is needed is not so much a name change as much as global acceptance of what has been proven through objective research -- that the functional GI disorders are legitimate and amenable to standard scientific enquiry. This acceptance is not likely to occur until clinicians, investigators, patients, regulatory agencies, and funding organizations are able to understand these disorders and the patients who have them from a more appropriate perspective. When this occurs, the FGIDs will have the same status and level of acceptance and support as "organic" disorders, and the current distinction between functional and organic GI Disorders will not be necessary.

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Table 1. Meaning of "Functional" GI Disorders by GI Physicians throughout the world

Country	Term	Translation term	Meaning to MD	Meaning to patient	Country	Term	Translation term	Meaning to MD	Meaning to patient
USA	Functional GI Disorder	"Not organic"	"Psychiatric"	"In my head"	Italy	Disturbo funzionale gastrointestinale		The term is not used on a regular basis; "not organic usually indicating ibs or non organic dyspepsia"; psychosomatic.	Not understood. It should be explained otherwise, the meaning is "psychosomatic", "in my head"
Romania	Tulburari functionale digestive (much less used: Tulburari functionale gastrointestinale)	Digestive functional disorders	Motility disorders or idiopathic disorders	"psychiatric or psychological"; patients need an explanation of this term.	Slovenia	Funkcionalne bolezni prebavil	Functional GI disorders	Non-organic	"psychological"
Brazil	Distúrbio Funcional do Aparelho Digestivo or Distúrbio Digestivo Funcional	FGID	"Psychologic" "Somatizer" "Hypochondriacs" "waste of time" "crazy"	"Psychologic" "Somatizer" "Hypochondriacs" "waste of time" "crazy"	Croatia	Funkcionalna oboljenja probavnog trakta	Functional gastrointestinal tract disorders	Functional not-organic disorders	Psychological or even psychiatric
Spain	Trastorno funcional digestivo				Ukraine	Travní funkcionální zvrushenni	Functional digestive disorders	Mainly psychological	Mainly psychological or psychiatric
France	Troubles fonctionnels digestifs	Functional GI Disorder	- - Psychosomatic - A disorder related to stress, anxiety etc... without any organic basis. Sometimes negative perception of patients as difficult and cumbersome	"They say it's in my head because they couldn't find the cause" "They just say this to get rid of me"	China	"gong/neng/xing(= functional) wei/chang/dao (gastrointestinal) ji/huan (=disorder)". Or respelt: Kong Neng Hsing Wei Ch'ang Tao Chi Huan	Functional gastrointestinal disorder	Non-organic, psychiatric	Psychological, stress-related
Netherlands	Functionele maag-darmstoornis	Functional GI Disorder	Not organic, caused by disordered function	Caused by disordered function	Greece	Λειτουργική διαταραχή πεπτικού (συστήματος)	Digestive (system) functional disorder	For most MDs: "No cause identified following routine investigations, including blood tests and endoscopy/radiology"	"Psychological" "In my head" Most patients ask for an explanation; it requires at least 50-100 words to explain the term to a patient
Japan	Kinousei Shoukakan Shougai (機能性消化管障害)	Functional GI Disorder	"Gastrointestinal Dysfunction"	"Something wrong in my gut."	Russian	Funcionalnoe narushenie pishevovo trakta	Functional GI Disorders	Many MD's in Russia and Bulgaria look down on the diagnosis (thinking that it is not grounded or serious)	Patients are frequently told that there is nothing wrong with them so they often change physicians in attempt to find someone who can tell them what is wrong. They frequently come to the physicians thinking that they have colitis (from reading popular journals ?)
Germany	Funktionelle GI Erkrankung	Same wording as in the US	Abdominal symptoms of unknown origin, but with high probability that psychological factors are involved in the genesis of symptoms but a possibility that altered GI function plays a role	Depends very much on the level of personal information and the way the physician presents this diagnosis to the patient. In general patients don't use this term very often. The majority of patients might associate an involvement of stress or stressors.	Bulgarian	Fincionalno narushenie na stomashno-chrevnijat trakt	Functional GI Disorders		
Hungary	A tápcsatorna funkcionális rendellenessége vagy betegsége	The disorder of a function without organic basis	In Hungarian it means functional without psychiatric pattern	Functional in other words disorder without organic basis	Czech	Funkchny strevny poruchy (Funkční střevní poruchy)	Functional GI Disorders		
Hungary	Scientific: Funkcionális gasztroenterológiai korekepek; more popular: Emesztöeszervi müködési zavarok	Functional Gastroenterological disorders; Popular: digestive functional troubles	Motility disorders	Motility disorders	Israel	תודוקפת תוערפה לוכיעה תכרעמ לש חאפראוט תיפקודיט של מא'ארכט חא'יקול	Functional disturbances of the digestive system	Not organic, psychological	Has no real meaning until explained that it is a problem that is related to function rather than structure

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Charles Gerson



Mary-Joan Gerson

Irritable Bowel Syndrome: A Cross-Cultural Perspective

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Ever since IBS has been codified by the first Rome Committee in the early 1990's, symptom patterns, psychosocial findings and epidemiologic studies have originated predominantly from the United States, Canada and Western Europe. More recently, however, there have been a number of publications documenting IBS around the globe (1, 2). Most of these articles have described population incidence, sex ratio and age range. While some studies have suggested that incidence is lower in Asia than in Europe or the United States (3), others have shown comparable rates (4). The growing interest in IBS around the world is exemplified by the FBG membership whose latest directory has 48 members from Latin America, the Middle East and Asia.

IBS has been described as a biopsychosocial illness, associated with life stress, psychological distress and somatization (5). Comparing its incidence in different countries does not address the myriad of possible cultural influences on symptom presentation, health care utilization and treatment implications. As Kleinman, et al, note: "Illness behavior is a normative experience governed by cultural rules: we learn "approved" ways of being ill. It is not surprising then, that there can be marked cross-cultural and historical variation in how disorders are defined." (6). Beliefs about illnesses, such as functional gastrointestinal disorders, are embedded in cultural world views.

The cultural context of illness, which most essentially includes the family and work environment, may have a significant effect on IBS symptoms and differs from country to country. The relationship between the individual and the community varies by culture; communal coping is quite different from individual coping. A stressful event that is normally processed in the context of close relationships may increase manifestations of IBS if those relationships are dysfunctional. Research in the United States has found that conditions as disparate as rheumatoid arthritis and congestive heart failure are affected by spousal conflict (8, 9).

What about the effects of modernization on functional bowel disorders? While IBS was originally thought to be less prevalent in "non-Westernized" societies, it now appears that rapid societal influences may be changing this. Several studies have shown significantly greater IBS incidence in urbanized populations compared to rural subjects (10, 11). Urban change includes stressful living conditions and possible disruption of traditional family relationships.

What is the empirical evidence documenting cultural influence on illness behavior? China provides some examples. In one study, Chinese survivors of the Cultural Revolution expressed disturbed thoughts about the experience of bodily pain (7). Health research has recently begun to focus on the beliefs and expectations that accompany illness. It has been reported that traditional Chinese belief in the relationship of astrological signs and illness can hasten death by up to five years (12).

Health care utilization may be affected by cultural factors. The often-quoted reversal of the female-male ratio among IBS patients in India as compared to the United States may represent a cultural effect -- the difficulty that females in India have in accessing medical care for IBS symptoms (13). A colleague in Sri Lanka offered a different explanation for the noted male dominance in IBS presentation. He hypothesized that males have been entering the work force in high pressure commercial situations and the associated stress may be manifesting itself in IBS symptoms (14,15). In China, patients with chronic illnesses such as IBS are often seen by traditional doctors, possibly biasing IBS epidemiological studies performed in "Western" medical facilities. Traditional healers are more likely to use complementary methods. Differences in local culture may affect the choice of complementary therapies by IBS patients, as documented in a study of Hispanics living in Texas (16).

Our interest in these questions led to a global survey of 239 IBS patients in eight countries -- United States (New York City), Mexico (Mexico City), Canada (Montreal), England (London), Italy (Bari), Israel (Beer-Sheva), India (Calcutta), and China (Beijing) (17). Our study was designed mainly (1) to evaluate respective family relationship patterns, as measured by the three sub-scales of support, depth and conflict and (2) to investigate attitudes of IBS patients towards psychological vs. somatic factors as explanations for their colonic symptoms (mind-body questionnaire). The mind-body questionnaire asked patients to agree or disagree with statements attributing their symptoms to emotional or physical causes. Results from both questionnaires were correlated with level of IBS symptoms. Finally, we assessed whether there were significant universal findings or significant intra-country differences.

As the study progressed, it became clear that it is possible to perform this kind of research via the internet -- a research team without walls. Our colleagues were primarily at tertiary centers, so the results mainly apply to IBS patients referred

to specialists. Most patients were urban-based and lower or middle class. The one exception was Italy, where the study population was 50% rural and had the lowest level of education. This may explain why the results from Italy were the most strikingly different from all other countries, with high relationship conflict, low depth and support, and reversed ratio of physical and emotional attributions. The sex ratio of the entire study population was fairly typical of other surveys, with 68% female. However, the usual variance was present in the Indian group, where 93% were male.

There was surprising universality of results among the eight countries with some interesting variation between countries. The relationship scale that we used had highly significant results. Aggregate analysis of the data showed that patients whose family relationships were high in support and depth had low IBS activity, while patients who scored high in family conflict had high IBS activity. There is empirical evidence that spousal support is related to lower levels of reported pain and to pain reduction (12). A positive link has been described between health and social support. However, it is possible that illness may have a negative effect on relationships, leading to increased conflict. Additionally, IBS patients suffer from chronic pain and, because of their physical distress, may be more sensitive to conflict and perceive significant others as less supportive.

The mind-body questionnaire also yielded highly significant correlations. Patients with greater psychological attributions had lower IBS activity; patients with greater physical attributions had higher IBS activity. It is possible that patients who are more psychologically minded minimize physical symptoms. However, it has been reported in the literature that psychotherapy is more successful in IBS patients who believe that stress is related to their symptoms (18). In either case, patients may benefit from accepting and not resisting the concept that IBS is a mind-body illness.

The universal findings in so many different geographic settings may represent an urban effect on a global scale, consistent with recent IBS epidemiologic reports of comparable IBS prevalence in different countries (4). Most of our subjects lived in cities, experiencing the effects of globalization. However, some of the intra-national differences we observed, particularly in India and China, suggest there is a cultural influence on IBS. India had the highest conflict sub-scale score in the relationship scale, while China was low in depth and support. These findings may be a result of the disruption of traditional family relationships associated with modern urbanization in those countries. China and India had the highest scores for agreement with both mind and body attributions of IBS. This

is consistent with the holistic view of health prevalent in both countries.

Our results indicate that physicians should address the importance of healthy relationships in their IBS patients, including the attitudes of significant others. The mind-body questionnaire results suggest that psychological awareness should be fostered as well. It appears crucial that physicians be aware of possible differences between their belief systems and that of their patients.

There are clearly numerous cross-cultural aspects of IBS still to be explored. A new subcommittee of the FBG has been established to look at issues represented in our study, including the influence of culture on symptoms, manifestation of psychological problems, and how family dynamics affect IBS symptom patterns. Hopefully, more research will emerge regarding these and other questions. Finally, the terminology used to describe functional bowel disorders may not be easily translatable from one culture to another. For example, one of the supportive symptoms for the Rome criteria for the diagnosis of IBS – bloating -- is not directly translatable into Spanish usage (19). Patients in different countries with different languages may require a change in terms in order to be compared. In research studies, the translatability of questionnaires should be a rigorously addressed (20).

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Olafur Palsson

The Psychopathology of Functional Somatic Syndromes:

Neurobiology and Illness Behavior in Chronic Fatigue Syndrome, Fibromyalgia, Gulf War Illness, Irritable Bowel, and Premenstrual Dysphoria, by Peter Manu, MD

Haworth Medical Press, Binghamton, NY, 2004

Review by: **Olafur S. Palsson, PsyD**

Associate Professor of Medicine, UNC Center for Functional GI & Motility Disorders, University of North Carolina at Chapel Hill

Peter Manu, MD, Professor of Clinical Medicine and Clinical Psychiatry at Albert Einstein College of Medicine in New York, has recently written a book that is likely to be of interest to people investigating functional GI disorders. The full title of his work, which was published by Haworth Medical Press in 2004, is *The Psychopathology of Functional Somatic Syndromes: Neurobiology and Illness Behavior in Chronic Fatigue Syndrome, Fibromyalgia, Gulf War Illness, Irritable Bowel, and Premenstrual Dysphoria*.

Dr. Manu's book is intriguing and informative reading for anyone interested in understanding functional gastrointestinal disorders (FGIDs) in the context of other chronic health problems. In one handy resource, it provides a detailed comparative picture of research on the pathophysiology and psychopathology of IBS and the four other chronic and presumably functional disorders listed in the book title. The literature review for the book appears very thorough and complete, which is the main strength of this work. Indeed, the bulk of the book is a detailed summary of findings, study by study, from the vast empirical literature in this domain.

The book is organized into four parts. The first part addresses the definitions and modern conceptualizations of the five disorders discussed in the book. The second part describes and compares the burden of psychopathology and somatization in these disorders. The third part is a review of the neuroanatomical, neurochemical and neuropsychological findings in the disorders. The final part of the book provides a review of data on illness behavior, personality traits and maladaptive coping and their measurable impact on these disorders.

One immediate question that comes to mind when one begins to read this book is how the author settled on the particular disorders that are the scope of his review. His choice of disorders is somewhat curious and not well explained. While IBS, fibromyalgia and chronic fatigue syndrome have enough historic overlap in empirical research to be natural choices for such a grouping of somatic syndromes, the rationale for including Gulf War illness or premenstrual dysphoria is less obvious. In fact, Dr. Manu's literature summary in the book shows that, in contrast to the first three disorders, comparable data for these latter two conditions is often missing. His claim that these five particular diagnoses represent a "tight-knit family of syndromes" is, therefore, somewhat questionable. Most people familiar with the growing comparative literature on somatic syndromes may suggest there are other disorders that would seem to fit just as well, or better, into a somatic syndrome grouping, such as chronic pelvic pain or temporomandibular joint disorder.

The comprehensive literature summary makes Dr. Manu's book worth keeping handy as a reference. It is a valuable resource for anybody seeking a quick overview of the research on the

underlying mechanisms of each of these disorders, in a format that gives a good idea of the comparability of research findings for the five different disorders with regard to each type of mechanism (psychological, neurological, endocrine, etc.).

Dr. Manu's work highlights in a very comprehensive and convincing manner that these diverse disorders share a number of objectively measurable characteristics that span the biopsychosocial spectrum. The author demonstrates well that the central characteristics of these disorders are chronic symptoms of pain, fatigue, sleep disturbance, and a history of psychiatric illness. In addition, many patients who have these disorders also have personality abnormalities, trauma history, dysfunctional coping style, and a tendency to attribute their illness to a physical cause.

The subject matter of the book -- the mysterious and thought-provoking similarities between these disorders -- makes for a topic that could interest many. Unfortunately, the book is not well suited for the casual reader and is definitely not a page-turner. In many places, the literature summary consists of little more than a shortening and paraphrasing of the published abstracts of the articles, and there is little attempt to integrate or interpret the findings. Unnecessary details, such as the mean age of the subjects in each group or the exact p values for comparisons, reduce the readability of the text without adding meaningful information. Because of these shortcomings in form, the book is likely to appeal mostly to researchers.

Even more disappointing, Dr. Manu's book will inevitably frustrate those who seek a new understanding of the nature of the associations among these disorders. The author offers little insight or even hypotheses or speculations about the etiological reasons for the many similarities catalogued between the disorders described. Indeed, the book ends abruptly without any kind of conclusion or integrative chapter that summarizes the evidence, almost as if the most important chapter -- telling us what all of this might mean -- was somehow left out of the printed copy by mistake.

In summary, Dr. Manu's book is a comprehensive and thorough review and comparison of the characteristics of five disorders that might be labeled functional somatic syndromes. It is a valuable work because it is so recently published and quite thorough in its coverage. However, because it offers little in the way of insights, original hypotheses or research directions, this book will age quickly and decrease substantially in value with each passing year as new research on these disorders accumulates.



Nancy Norton

International Foundation for Functional Gastrointestinal Disorders

Spring 2005 Update

Nancy Norton

President

Those of you familiar with the International Foundation for Functional Gastrointestinal Disorders (IFFGD) know we are devoted to improving the lives of people affected by functional GI and motility disorders. We communicate the needs of this patient population to researchers and regulators, encouraging investigation that may lead to improved treatments. We also work to increase awareness of the medical and personal issues faced by those affected among care providers and the public. In the coming months, we will continue this work through several key initiatives.

1. IFFGD recently initiated report language that appeared as follows in the Senate, Departments of Labor, Health and Human Services and Education, and Related Agencies Appropriations Bill 2005.

Irritable Bowel Syndrome

The Committee encourages NIDDK to provide adequate funding for irritable bowel syndrome/functional bowel disorders research and to give priority consideration to funding grants that will continue to increase the IBS portfolio. The Committee requests that NIDDK actively pursue the development of a strategic plan for IBS research.

IFFGD is hopeful that we will see a **Strategic Planning Meeting for IBS Research in 2005**.

2. During **IBS Awareness Month** in April, we will intensify our efforts to increase awareness of IBS. As in previous years, we will develop media messages aimed at helping sufferers recognize symptoms. Although more people are now familiar with the term "IBS", many still do not recognize this constellation of symptoms as adding up to an identifiable disorder and do not seek help.
3. This year, we will be adding an additional tool for media professionals – the "**Reporter's Guide to Irritable Bowel Syndrome**." The Guide is designed to encourage media coverage of IBS and provide reporters with authoritative information in a concise format.
4. IFFGD is proud to, once again, participate in the **Digestive Disease National Coalition Public Policy Forum** in March 2005. It is an important opportunity for coalition members to educate policy makers about the needs of persons affected by digestive disorders and promote strong federal investment in digestive disease research, patient care, prevention, and public awareness.

Each year brings increased understanding of functional gastrointestinal and motility disorders. New theories about causes are developed and treatment approaches are refined. Although progress is certainly being made, so much about these disorders is still unknown – leaving millions of patients with questions about how to manage intrusive or debilitating symptoms. There is still much work to be done.

Thank you for your support of IFFGD,
Nancy Norton
President

Irritable Bowel Syndrome: A Cross-Cultural Perspective — **C. Gerson, MD and M. Gerson, PhD** — from page 7

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Rome III Board

From left: Michel Delaux, William Whitehead, Douglas Drossman (President), W. Grant Thompson, Nicholas Talley, Robin Spiller, Enrico Corraziari

Standing: Carlar Blackman (Administrative Coordinator), George Degnon (Executive Director)

ROME III

Douglas A. Drossman



Drossman and George Degnon (Executive Director)

Continuing a 5-year project, the Rome Foundation met in Rome, Italy, in November/December 2004. The purpose of this meeting was to bring all 90 members of the 14 Rome III committees together to develop and modify diagnostic criteria for the functional GI disorders and to update the field through evidence-based publications. Ultimately, the work will lead to a journal publication and a book (See Table 1 for Table of Contents of the book).

The concept of the Rome criteria and the work of multi-national committees actually began about 15 years ago, with the publication of a document that set up a classification system for the 21 functional GI disorders (1). This led to a series of publications in the Italian journal *Gastroenterology International* and eventually to a book published in the USA (2) which became known as Rome I. Following this, another set of committees were formed to revise the previous documents. These documents were published as Rome II in a supplement of the journal *GUT* in 1999 (3) and in 2000 as a book (4).

The Rome III project began in 2001, when a 7-member coordinating committee was formed. The committee selected 14 committee chairs and 14 co-chairs who then identified their committee members. Qualifications for committee membership were based on academic achievement, international recognition in the field, diversity considerations (gender, sociocultural, geographic, multidisciplinary), and ability to work in groups. Once the committees were formed, about 18 months were spent drafting and re-circulating the documents, which eventually culminated in the most recent meeting in Rome.

This meeting brought together, for the first time, all members who had been communicating by email to finalize the scientific content, achieve consensus on diagnostic criteria, and resolve any issues of conflict relating to interpretation of the data. The meetings were organized as two-day blocks with seven committees working full-time, although with some of the time for enjoying meals and sights of the city of Rome. The process was repeated for the remaining 7 committees and, after this block, an all-day "harmonization meeting" was held where the 28 chairs and co-chairs summarized their work and discussed areas of disagreement. Since our meeting in Rome, the documents have been further revised and are currently out for review. After all revisions have been completed, the Rome III documents will be published as a supplement in *Gastroenterology* in Spring 2006 and as a book in Summer 2006.

Reflecting the expansion and evolution of these activities, the Rome initiative became the Rome Foundation in 2004. Goals of the Foundation include the publication of educational documents, funding of research proposals, disseminating educational products to developing nations, developing a CD-slide set, and presenting the work at international conferences. President of the Rome Foundation is Douglas Drossman, MD (Chapel Hill, NC) and board members include: Enrico Corraziari (Rome, Italy), Michel Delvaux (Nancy, France), Robin Spiller (Nottingham, England), Nick Talley (Rochester, MN), W. Grant Thompson (Ottawa, Canada), and William Whitehead (Chapel Hill, NC). The Rome initiative is supported by: Ms. Carlar Blackman, who has coordinated the administrative activities of the committees for over 9 years; Mr. George Degnon, Rome Foundation Executive Director; and Ms. Kathy Haynes, his assistant. The Foundation has nine pharmaceutical sponsors, and regular meetings of the sponsors with the Rome III Board are held annually at DDW through the Rome Industry Resource Council, which is chaired by Bill Whitehead.

Reference List

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Rome III Committees

Rome III book: Table of Contents

1. Functional Gastrointestinal Disorders and the Rome III Process
2. Fundamentals of Neurogastroenterology: Basic Science
3. Applied Principles of Neurogastroenterology: Physiology/Motility Sensation
4. Pharmacological and Pharmacokinetic Aspects of the Functional Gastrointestinal Disorders
5. Gender, Age, Society, Culture and the Patient's Perspective in the Functional Gastrointestinal Disorders
6. Psychosocial Aspects of the Functional Gastrointestinal Disorders
7. Functional Esophageal Disorders
8. Functional Gastroduodenal Disorders
9. Functional Bowel Disorders
10. Functional Abdominal Pain Syndrome
11. Functional Biliary Tract and Pancreatic Disorders
12. Functional Anorectal Disorders
13. Childhood Functional Gastrointestinal Disorders: Neonate/Toddler
14. Childhood Functional Gastrointestinal Disorders: Child/Adolescent
15. Design of Treatment Trials for Functional Gastrointestinal Disorders
16. The Road to Rome



Rona Levy

Lin Chang

Third Functional GI Disorders Young Investigators' Forum

Rona Levy, *Chair*
Lin Chang, *Co-Chair*

The Third Functional GI Disorders Young Investigators' Forum took place March 18th-20th at the L'Auberge Del

Mar Resort in Del Mar, California. By all accounts, the meeting was very successful, with participants reporting they found the content highly useful and the meeting quite enjoyable. From those who submitted abstracts representing their work, twenty young investigators were selected to attend the forum and present their research. This year, young investigators from academic institutions in the U.S. and Europe attended the meeting. All travel and lodging expenses were paid by FBG for attendees through an educational grant from Novartis Pharmaceuticals.

- **Dr. Brecht Geeraerts** from the University of Leuven, Belgium, whose paper was titled "Influence of Experimentally Induced Anxiety on Gastric Sensorimotor Function in Man"
- **Dr. Syed Thiwan**, a Fellow at University of North Carolina, Chapel Hill, who presented on "Factors Predicting Symptom Reports of 'Side Effects' When Using Tricyclic Antidepressants".

Each of these recipients will receive a \$1500 award and plaques noting their achievement, with presentations taking place during the annual FBG meeting at DDW this coming May. The runner-up was Dr. Lukas Van Oudenhove, who presented on "Influence of Anxiety on Gastric Sensorimotor Function in Functional Dyspepsia."

Congratulations to all!

Faculty at the meeting were: Rona Levy (Chair, University of Washington), Lin Chang (Co-Chair, UCLA), William Chey (University of Michigan), Ray Clouse (Washington University), Douglas Drossman (University of North Carolina), George Longstreth (Kaiser Permanente, San Diego), and Arnold Wald (University of Pittsburgh). Faculty presentations covered a wide range of educational topics, including obtaining public and private grant funding for research, maximizing physician-patient interactions, benefits and pitfalls of an academic career, optimizing mentoring partnerships, and interdepartmental research collaborations. Break-out sessions were also introduced this year, giving participants the opportunity to interact in small groups with faculty. Break-out session topics dealt with publications, grant writing, and patient interviewing skills.

Young investigator meeting presentations were rated by faculty on three criteria: presentation style, slide quality, and scientific content. The overall quality of all presentations was excellent, however, the two highest rated presentations were selected to receive special recognition awards. The winners were:



Award recipients Syed Thiwan and Brecht Geeraets with runner-up Lukas Van Oudenhove, flanked by Lin Chang and Rona Levy



FBG Faculty, left to right: Ray Clouse, William Chey, George Longstreth, Rona Levy, Lin Chang, Douglas Drossman



Faculty and fellows during a conference session



Paul Hyman

FBG Biographical Sketch

Paul Hyman

I left behind a dream of becoming the next JD Salinger when I entered Boston University.

My father agreed to college only if I took a pre-med major. In the fall of 1967, I was one of 1200 students enrolled in the School of Liberal Arts. Six hundred of us were pre-med. After freshman chemistry, only 200 remained. Next year, in each organic chemistry lab, there were 30 students but glassware only for 28. Each crash of shattered glass on the cold stone floor told the class that another traumatized soul would not be going to med school. Only 50 sophomores survived organic chemistry. In the end, thirty of us matriculated to some kind of professional school. I received my letter of acceptance from the University of Connecticut on Halloween 1970. Full of joy that night, I drove from to the University of Connecticut in Storrs and got engaged to Beverly, my partner for the last 35 years, in a romantic sorority candlelight ceremony.

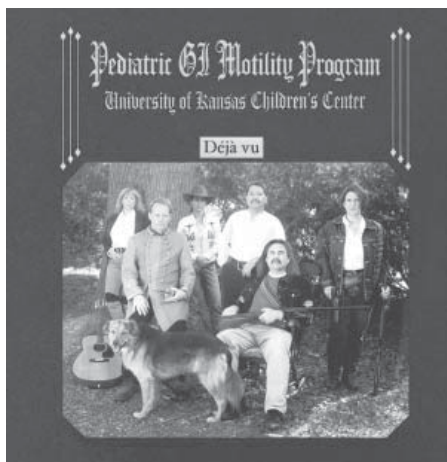
For my first clinical experience, I followed a community practitioner one day each week. My preceptor was a southern gentleman who had trained at the Massachusetts General Hospital. He lived in a country estate at the top of a hill and he admired Spiro Agnew. I was a long-haired, sneaker-wearing, lefty Jewish rock-and-roller. Despite different appearances and philosophies, we shared a love for medicine. By the end of our time together, Dr. Ragland convinced me to spend three months training with his friend Kurt Isslebacher at the MGH. Dr. Isslebacher offered me a position in the lab and paired me with GI fellow Tom Garvey. Tom and I had a wonderful time, and my abstract won the first AGA Student Research Award. Dr. Isslebacher asked me if I knew why I won. I said because I worked hard. He said something like: "Hyman, everyone works hard. You were in the right place at the right time." After my plenary talk, somebody from the NIH walked over and asked if I would like a fellowship in Digestive Disease and I said sure, right after my residency in Pediatrics at Bellevue.

Bellevue was like a MASH unit with walls. I loved watching the sun come up over the East River after a night in the ICU, mouth tasting like old pizza, sign-out moments away. Here is a story about when I decided to become a specialist. One night, a toddler was admitted with high fever and comatose after a brief history of headache and photophobia. I did a spinal tap, looked at the smear and saw gram positive diplococci and abundant white cells. I put in an IV and pushed penicillin. The next morning, that baby was standing in his crib, shaking the bars, happy as a clam, and I cried tears of joy. That night I went home, but another kid came in with the same history, and the resident did everything right and saved that baby, too. The next morning, I found myself disappointed to learn that everyone could manage meningitis. I wanted to fix kids that no one else could fix. After NIH, I went to California to learn clinical skills from Marvin Ament at UCLA. In sessions with David Fleisher, I learned about the biopsychosocial model and the importance of the patient

interview. Dr. Ament assigned me to a hospital with no pediatric gastroenterologist, Harbor UCLA Medical Center.

Soon after, GI motility maven Bill Snape took over as GI Division Chief. One day, he got a call from a pediatric gastroenterologist in another state asking for help with a 1 year old who could not eat without retching himself into a stupor. Dr. Snape told the referring physician: "You don't want to talk to me. I'm the adult motility expert. You want to speak to Paul Hyman. He's the pediatric motility expert." The patient arrived in April 1984. We found fasting

normal motility, but no contractions after a meal. Bethanecol and metoclopramide had no effect on the symptoms or postprandial hypomotility. Bill suggested we try cisapride, a new drug that he had in little vials for IV use in animals. Quickly, we presented the idea to the FDA, Janssen Pharmaceuticals, and our Human Subjects Committee, and obtained an emergency compassionate use IND. IV cisapride reversed the hypomotility and symptoms, and there was a celebration. I said: "That was rewarding! I helped a child who no one else could figure out. I'd like to do more of those." Jim Long, research director for Janssen agreed and provided funding. I then phoned Takeshi Tomomasa to ask him how to set up antroduodenal manometry in children. Takeshi said his English was not



Multidisciplinary Biopsychosocial Team

good enough to explain over the phone, but he had funding from his government and he would visit for two years and show me. Soon, Carlo Di Lorenzo joined us. Tomomasa, Di Lorenzo and I together studied pseudo-obstruction and developed colon manometry. By the late 80s, we realized that everyone who came for evaluation did not have pseudo-obstruction. Half the patients had normal motility, but were disabled by pain. I then connected with UCLA pain management specialist Lonnie Zeltzer. We began an inpatient pain treatment program. Many of these children were victims of pediatric condition falsification (formerly Munchausen syndrome by proxy). We saved many children from further abuse. Other children and adolescents had a syndrome of functional gastrointestinal disorders and maladaptive coping, so that suffering and disability were out of proportion to overt physical or mental health abnormalities. Our biopsychosocial multidisciplinary team approach reversed their illnesses.

Four years ago, the University of Kansas offered an opportunity to focus on my special interests. Evaluations for mystery illnesses are precise, cost and time efficient, and uniformly rewarding for families who make the trip to Kansas City. Our team (see album cover parody photo) is child and family friendly, and we all love what we are doing. Once we make a pain-related diagnosis, we are able to offer an 8-week pain treatment program that includes medical care, individual

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DDW Presentations

Sponsored by Motility and Nerve-Gut Interactions Section of AGA

Sunday, May 15, 2005

Symposia

2:15- 3:45pm -- Controversies in the Management of IBS (Clinical Practice Section Symposium) (Session 21, Room S100b)

Chair: **William D. Chey**

Speakers:

- **Brooks Cash** – IBS: Is it really a diagnosis of exclusion?
- **Doug Drossman** – Psychopharmacological & behavioral therapies: who, when & how?
- **Eamon Quigley** – Alternative therapies for IBS
- **Lin Chang** – Emerging Therapies: What does the future hold?

4:00-5:30pm – Stress & the Brain-Gut Axis (Motility & Nerve-Gut Interaction Clinical Symposium) (Session 50, Room S403)

Chairs: **Emeran Mayer, Douglas Drossman**

Speakers:

- **Arthur Craig** – The biology of interoception: how the brain feels what goes on in the body
- **Helen Mayberg** – Modulation of cortical-limbic interactions by cognitive behavioral therapy in major depressions
- **Douglas Drossman** – Clinical evidence for the effectiveness of centrally targeted therapies in functional GI disorders
- **Emeran Mayer** – Modulation of corticolimbic interactions by pharmacological & non-pharmacologic treatments in chronic GI disorders

Abstract Presentations

8:30-10:00am – Esophageal Motility, Sensation & Disorders (Combined Session 129, Room E271a)

- Manometric amy nitrate test distinguishes idiopathic achalasia from postfundoplication pseudoachalasia
- Healing of severe reflux esophagitis does not improve esophageal peristaltic dysfunction
- The Kuala Lumpur Hospital Achalasia Cardia Registry: a single tertiary center experience
- The effect of tegaserod on esophageal function: a randomized control trial in healthy volunteers
- Esophageal manometry in the management of children with poor weight gain and upper GI tract symptoms
- Esophageal motility disorders are common in morbidly obese patients

10:30am-Noon -- Intercellular Signaling in the Intestine (Basic Session 108, Room S505)

- Dissociation of activity in longitudinal muscle and interstitial cells of cajal
- P2Y1 receptor mediates inhibitory purinergic neuromuscular transmission in the human sigmoid colon
- NF-Kappab and MAPKs differentially regulate eosinophil chemotaxis by human colonic circular smooth muscle cells
- Auto-antibodies as mediators of immuno-neural signaling in the enteric nervous system (ens)
- Role of proteases and protease-activated receptor-2 (par2) in pain associated with IBS
- Mast cell activation increases excitability in guinea pig esophageal vagal C-fibers

2:15-3:45pm – Small Bowel Motility & Disorders (Combined Session 152, Room S505)

- Correlation of small intestinal motor parameters with intestinal gas dynamics stimulated by the 5-HT4 receptor antagonist tegaserod in healthy humans with gas retention
- Blockade of P28 mitogen activated protein kinase pathway ameliorate delayed intestinal transit in burned rats
- Involvement of inflammation in impaired nitrgeric jejunal motor control in spontaneously diabetic Bb rats
- Reduce Bcl-2 expression & increased myenteric neuron apoptosis in patients with idiopathic enteric neuropathy (en)
- Intestinal electric stimulation accelerates transit of entire intestine in conscious rats
- New insight into intestinal motor activity: correlation of endoluminal image analysis & displacement

Poster Sessions

8:00am-5:00pm -- Clinical Posters: (a) Anorectal Motility, Sensation & Disorders; (b) Colonic Motility & Disorders

8:00am-5:00pm -- Basic Posters: GI Sensory Mechanisms

Monday, May 16, 2005

Abstract Presentations

2:15pm – Enteric Neural Pathways (Basic Session 103, Room S505)

- Synchronization of enteric neuronal firing during the murine colonic mmc
- Neuronal cyclic amp signaling is polarized for descending reflexes in the myenteric plexus of the guinea pig small intestine
- Age-related changes in gallbladder innervation and smooth muscle reactivity of female guinea pigs
- Tonic inhibitory influence of the vagus in experimental colitis
- Regional variation in icc distribution, pacemaking activity and neural responses in the

- longitudinal muscle of the murine stomach
- Immunohistochemical characterization of glial cells in the human enteric system (ens)

2:15-3:45pm – Anorectal Motility, Sensation & Disorders (Clinical Session 139, Room S402)

- Effect of red chili powder on rectal perception in response to slow ramp and rapid phasic rectal distention: the mechanism of actions
- How does the brain process pelvic floor training by biofeedback?
- Application of L-erythro methoxamine gel increases anal resting pressure in patients with passive faecal incontinence
- Development of a high-definition motility visualization system (hd-Mvs) for improved evaluation of anorectal function
- Anorectal sensori-motor reflex in humans
- On asymmetry in sphincters (oasis): first evidence that innervation asymmetry is relevant for sphincter performance

Poster Sessions

8:00am-5:30pm – Clinical Posters: (a) Esophageal Motility, Sensation & Disorders, and (b) FGID: Psychosocial & Psychotherapeutic

8:00am-5:00pm -- Basic Posters: Brain-Gut Axis I

Distinguished Abstract Plenary Session

4:00-5:30pm – Motility & Nerve-Gut Interactions Distinguished Abstract Plenary Session (Session 151, Room E352)

Chairs: **Douglas Drossman & James Galligan**

Abstract Presentations

- **Colonic mucosal mast cell mediators from patients with Irritable Bowel Syndrome excite enteric cholinergic motor neurons** — Giovanni Barbara, Cesare Cremon, Vicini Riccardo, Cervio Elisabetta, Barbara Balestra, Giovanni Di Nardo, Roberto De Giorgio, Vincenzo Stanghellini, Roberto Corinaldesi, Marcello Tonini
- **The influence of genes and low birth weight on the development of functional gastrointestinal disorders, a twin study research** – May-Bente Bengtson, Torbjorn Ronning, Jennifer Harris, Morten Vatn
- **Association of SERT polymorphism with psychological distress, symptoms and predominant stool group in women with Irritable Bowel Syndrome** – Margaret Heitkemper, Ruth Kohen, Monica Jarrett, Kevin Cain, Robert Burr, Anne Poppe
- **Evidence for a distinct mechanism of serotonin transporter gene regulation in the human intestine involving a novel splice variant** – David Linden, Sheryl White, Kevin Foley, Lee Stirling, Gary Mawe
- **Effect of ghrelin on gastric emptying in patients with neurogenic gastroparesis** – Pierre Poitras, Murielle Binn, Caroline Albert, Alexandre Gougeon, Remi Rabasa-Lhoret, Jana Havrankova, Michel Lemoine, Bernard Coullie, Hana Maerki, Catherine Tomasetto
- **High-resolution manometry (HRM) reveals the development of esophageal peristalsis in pre-term and term neonates** – Ray Clouse, Annamaria Staiano, Gabriella Boccia, Erasmo Miele, Gennaro Salvia

Meetings

5:30-6:30pm – Motility & Nerve-Gut Interactions Section Business Meeting (E352)

Tuesday, May 17, 2005

Symposia

8:30-10:00am – New Drug Targets for the Treatment of Functional Motility Disorders (Motility & Nerve-Gut Interaction Research Symposium) (Session 11, Room E350)

Chairs: **James Galligan & Pamela Hornby**

Speakers:

- **Paul Bertrand** – Purinergic mechanisms
- **Pierangelo Gepetti** – TRPV channel family & endovanilloids
- **Yvette Tache** – Corticotrophin releasing factor
- **Jack Grider** – Enteric neuropeptides

2:15-3:45pm – Intestinal Gas & Abdominal Bloating (Motility & Nerve-Gut Interaction Clinical Symposium) (Clinical Session 51, Room E450b)

Chair: **Juan Malagelada**

Speakers:

- **Michael Levitt** – Intestinal gas physiology
- **William Hasler** – Regulation of intestinal gas transit
- **Fernando Azpiroz** – Intestinal gas & bloating
- **William Whitehead** – Bloating & eating disorders

Abstract Presentations

8:30-10:00am – Functional GI Disorders: Psychosocial & Psychotherapeutic/Research Forum (Clinical Session 141, Room S404)

- What characterizes a response to cognitive-behavioral treatment in a functional bowel clinical trial?
- Esophageal symptoms in patients with functional esophageal disorders (fed) are predicted

by psychological but not physiological factors

- Factors predicting symptom reports of "side effects" when using tricyclic antidepressants
- Education and reassurance affect satisfaction with care, health care utilization and clinical outcomes among new functional bowel disorders (fbd) patients
- Gastrointestinal-specific anxiety: further validation of the visceral sensitivity index
- Psychoeducational intervention in IBS patients improves symptoms, symptom-related anxieties, coping and health-related quality of life

2:15-3:45pm – Novel Receptor Mechanisms in Nerves Supplying the GI Tract (Basic Session 101, Room S402)

- Transient receptor potential vanilloid receptor 4 (TRPV4): neurogenic inflammation & sensitization by protease-activated receptor 2 (par2)
- Nfg induces sensitization of the vanilloid receptor (TRPV1) response in sensory neurons in acute pancreatitis by recruiting silent nociceptors
- Corticotropin releasing factor-1 receptors (crf1rs) only partially mediate the sustained visceral hyperalgesia induced by repeated psychological stressor in rodents
- Activation of vanilloid receptor 1 (vr1) preferentially induces apoptotic & non-apoptotic cell death in large dorsal root ganglion neurons from streptozotocin-induced diabetic rats
- Slow excitatory ("5-HT1P"-like) responses to mouse myenteric neurons in fHT: mediation by heterodimers of 5-HT1B/ID and Drd2 receptors
- Optical recording of synaptic Ca2+ signals, cyclic amp visualization & purinergic transmission in the human enteric nervous system

4:00-5:30pm – Pharmacotherapeutics in Functional GI Disorders (Clinical Session 146, Room E271)

- Pregabalin, a second-generation alpha2delta ligand, reduces hypersensitivity to rectal distention in patients with IBS
- Octreotide as potential treatment for patients with non-constipated IBS
- Identification of IBS responders to a 5-HT3 receptor antagonist by pretreatment brain response to rectal distension
- The safety and efficacy of dextropropofol in patients with diarrhea-predominant or alternating IBS
- Effect of a peripheral mu-opioid antagonist, alvimopan, on GI transit in health: reversal of codeine effects and stimulation of colonic transit
- Effect of tegaserod, a 5-HT4 receptor antagonist, on sensory and motor function of the proximal stomach in functional dyspepsia

4:00-5:30pm – Colonic Motility & Disorders (Combined Session 148, Room E450a)

- Hydrogen sulphide inhibits mouse jejunal and colonic motility in vitro
- Neonatal colon inflammation produces long-lasting hypersensitivity in mice
- Sustained decrease in the expression of excitatory 5-HT2a receptors in smooth muscle cells following colitis
- Declined intestinal T cell response in patients with IBS
- Exaggerated postprandial colonic motility in IBS: a role for 5-hydroxytryptamine (5-HT)?
- Electroacupuncture at St-36 stimulates colonic motility and accelerates colonic transit via Barrington's nucleus and parasympathetic nerves in conscious rats

4:00-5:30pm – Immune Modulation of Motility (Basic Session 109, Room S402)

- The vagal anti-inflammatory pathway prevents postoperative ileus by nicotinic acetylcholine receptor activation on intestinal macrophages
- Acetylcholine inhibits peritoneal macrophage activation by nicotinic receptor mediated recruitment and activation of the Jak-2/stat3 Cascade
- Role of IL-13 receptors in the physiological regulation of small intestinal smooth muscle function in murine small intestine
- Yohimbine, an alpha-2 adrenergic blocker, diminishes intestinal muscularis postoperative inflammatory responses in rodents
- Inhibition of gastric and colonic motility during sepsis is partly mediated by gut derived mediators in mesenteric lymph
- Time dependent changes in jejunal afferent mechanosensitivity in mice infected with the nematode trichinella spiralis
- POSTER SESSIONS

8:00am-5:00pm – Clinical Posters: (a) Functional GI Disorders: SxDxEpi & Validation, and (b) Pharmacotherapeutics in FGIDs

Sessions

10:30-11:30am – Post-Infectious Irritable Bowel Syndrome (Motility & Nerve-Gut Interaction Section State of the Art Lecture) (Clinical, Session 52, Room E354b)

Chair: **Douglas Drossman**

Speaker: **Robin Spiller** – Post-Infectious Irritable Bowel Syndrome

Meetings

5:30pm – FBG Reception (Monroe Ballroom, Palmer House Hilton)

6:00pm – FBG Meeting (Palmer House Hilton)

Wednesday, May 18, 2005

Symposia

2:15-3:45pm – Sensory Mechanisms in the Gastrointestinal Tract (Motility & Nerve-Gut Interaction Research Symposium) (Basic Session 10, Room E450a)

Chairs: **Michael Schemann** & **Ashley Blackshaw**

Speakers:

- **John Furness** – Intrinsic primary afferent neurons in the enteric nervous system
- **Jackie Wood** – Sensory signaling in the gut

- **Simon Brookes** – Sensory transduction at peripheral endings of extrinsic nerves
- **Kent Sander** – Non-neuronal cells as sites of sensory transduction in the gastrointestinal tract

Abstract Presentations

8:30-10:00am – Drug Receptors in the Brain-Gut (Basic Session 118, Room S402)

- Differential roles for Nmda and Non-Nmda receptors in visceral nociceptive transmission in the anterior cingulate cortex in normal and visceral hypersensitive rats
- Restraint stress-induced acceleration of colonic transit is mediated via a central Crf and intraluminal 5-HT3 receptors in conscious rats
- Differential effects of central Nmda receptor antagonists in rat models of inflammatory and non-inflammatory visceral hyperalgesia
- Differential distribution of metatropic glutamate receptors within gastric vagal brainstem circuits
- Effects of somatostatin-2 receptor (sst2r) stimulation on visceral afferents
- Hydrogen sulphide elicits an increase in jejunal afferent nerve activity and motility which is attenuated by 5-HT3 receptor blockade in the anaesthetized rat

8:30-10:00am – Functional GI Disorders: Symptoms, Diagnosis, Epidemiology and Validation (Clinical Session 144, Room S404)

- Study of visceral sensitivity measured by rectal barostat in pediatric patients suffering from functional GI disorders
- Evidence of hyperalgesia against capsaicin in subjects with uninvestigated dyspepsia
- Objective correlates of the symptom of bowel urgency in patients with IBS
- Rectal sensitivity and gastrointestinal symptom severity in IBS: is there a link?
- Clinical evaluation of the Rome II questionnaire for the diagnosis of functional GI disorders (FGID), as compared to the diagnostic of the clinician, in patients consulting in gastroenterology
- A study of candidate genotypes associated with dyspepsia in a US community

10:30am-noon – Receptors & Ion Channels (Basic Session 116, Room S101)

- Hyperpolarisation-activated nucleotide-gated ion channels differentially modulate the mechanosensitivity of different populations of extrinsic afferents of the mouse intestine
- Asic1, 2 & 3 contribute differentially to colonic serosal & mesenteric mechanoreceptor function
- Endogenous cannabinoids modulate visceral pain responses in rats
- Delayed visceral hypersensitivity in maternal separation depends on mast cell degranulation and is mediated by Ngf and the nociceptor TRPV-1
- Parasympathetic, but not sympathetic, afferent bladder-colon convergent drg neurons show enhanced excitability in experimental colitis
- Convergence of sensory pathways in the development of somatic and visceral hypersensitivity

10:30am-noon – Quality of Life & Resource Utilization in Functional GI (Topic Forum/Clinical Session 143, Room S406a)

- Do psychologic profiles and quality of life (QOL) differ in patients with dyssynergia and slow transit constipation (stc)?
- Functional dyspepsia is associated with reduced quality of life
- Symptoms underlying decrease in quality of life in functional dyspepsia, assessed using the Pagi-QOL and Pagi-Sym questionnaires
- African American patients with IBS suffer impairment of quality of life similar to their Caucasian counterparts
- Quality of life is improved in long-term treatment with Cilansetron 2 Mg when used as needed (prn) in patients with IBS with Diarrhea predominance (IBS-D)
- The impact of somatization on the use of gastrointestinal healthcare resources in IBS

10:30am-noon – Gastric Sensation & Disorders (Combined Session 155, Room S405)

- Influence of anxiety on gastric sensorimotor function in functional dyspepsia
- Nicotinic receptor stimulation potentiates mechanosensitive responses in gastric vagal afferents
- Influence of ondansetron on gastric sensorimotor responses to duodenal acid infusion
- Influence of cephalic phase of digestion on food intake
- Gastric hypersensitivity induced by esophageal acid infusion in healthy volunteers
- Effects of high-frequency low-energy gastric electrical stimulation (enterra device) on gastric distention and tone in gastroparetic patients

2:15-3:45pm – Gastric Motility & Disorders (Combined Session 132, Room S405)

- Gastrokinetic effect of ghrelin analogue Rc-1139 on post-operative and on morphine induced ileus in rats
- Murine antral slow wave frequency may be mediated through acetylcholine muscarinic M3 receptors located on the intramuscular interstitial cells of cajal
- Effects and mechanisms of gastric electrical stimulation on postprandial antral contractions
- Mechanisms underlying meal-related symptoms in functional dyspepsia
- Ghrelin enhances gastric emptying in diabetic gastroparesis
- Stretch induced changes in pacemaker frequency are mediated through intramuscular interstitial cells of cajal in the gastric antrum

Poster Sessions

noon – Clinical Posters: (a) Small Bowel Motility & Disorders; (b) FGID Sx Dx Epi; Gastric Sensation

1:00pm – Basic Posters: (a) Immune Modulation of Motility, Enteric Neural Pathways; (b) Intercellular Signaling, Brain-Gut Axis II

Update: NIH-Funded Mind-Body Infrastructure Grants Awarded for Functional GI & Motility Disorders

In 2004, the UNC Center for Functional GI & Motility Disorders and the UCLA Center for Neurovisceral Sciences & Women's Health each received 5-year "infrastructure grants" from NIH to foster interdisciplinary research on interactions between the mind and body in health and disease. Funding for these centers is provided through the Office of Behavioral and Social Sciences Research (OBSSR), within the NIH Office of the Director, as a cooperative effort of a dozen institutes. This broad-based initiative evolved from growing evidence that interdisciplinary research -- which integrates the study of social, behavioral, psychological and biological factors -- holds particular promise in understanding the causes of disease and in promoting health. NIH funded the first five mind-body centers in 1999 and an additional five centers were selected for funding in 2004. The grants to UNC and UCLA were the only ones in gastroenterology, with funding for the UNC grant being provided through the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and funding for the UCLA grant provided through the National Center for Complementary and Alternative Medicine (NCCAM).

UNC Center for Functional GI & Motility Disorders

*Research Day 2005: Gastrointestinal Biopsychosocial Research at UNC
June 11, 2005*

*Auditorium, Bioinformatics Building
University of North Carolina at Chapel Hill*

"Research Day 2005: Gastrointestinal Biopsychosocial Research at UNC" is sponsored by the UNC Center for Functional GI and Motility Disorders. The goals of the conference are: (1) to provide an outstanding educational experience by having the internationally recognized members of our Scientific Advisory Board give state of the art presentations on their research areas, (2) to introduce local researchers from UNC and our sister institutions (e.g., Duke, Bowman Gray, NC State) to the Center's research programs, and (3) to obtain a critical review of the Center's research from the Scientific Advisory Board and the audience. The meeting is open to anyone who wants to learn more about research on functional GI and motility disorders.

7:30am — Registration, coffee and refreshments

8:00-8:15am — Welcome

8:15-9:15am — Newer Pharmacological Treatments

- **Ray E. Clouse, MD**, *Prof. of Medicine & Psychiatry, Washington Univ. School of Medicine, St. Louis, MO* – Newer antidepressants in functional GI disorders
- **Douglas A. Drossman, MD**, *Prof. of Medicine & Psychiatry, UNC School of Medicine, Chapel Hill, NC* – NIH research on desipramine

9:15-10:15am — Genetics and Phenotyping of FGIDs

- **TBA**
- **William E. Whitehead, PhD** – *Prof. of Medicine & Gynecology, UNC School of Medicine, Chapel Hill, NC* – Is IBS one disease or many? Test of the Heterogeneity Hypothesis

10:15-10:30am — Break

10:30-11:30am — Brain Imaging

- **Emeran A. Mayer, MD** – *Prof. of Medicine, David Geffen School of Medicine at UCLA, Los Angeles, LA* – Brain imaging in IBS and FGIDs
- **Yehuda Ringel, MD** – *Prof. of Medicine, UNC School of Medicine, Chapel Hill, NC* – Past and proposed brain imaging work

11:30-12:30pm — Pelvic Floor Disorders

- **Anne W. Weber, MD** – *Associate Prof. of OB.GYN & Reproductive Sciences, Magee Women's Hospital, University of Pittsburgh, Pittsburgh, PA* – Pelvic floor disorders: Unmet needs and next steps

UCLA Center for Neurovisceral Sciences & Women's Health

*Annual Symposium of the
Center for Neurovisceral Science & Women's Health
UCLA Northwest Auditorium At Sunset Village*

The CNS/WH held its second annual symposium on January 21 & 22, 2005 at UCLA. Following the successful format of last year's event, the meeting was divided into a basic and translational symposium on day 1 (aimed at UCLA faculty and trainees), and a clinical symposium on the second day (aimed at community physicians and UCLA faculty and trainees). The symposium highlighted the depth and breadth of the Center, its interdisciplinary nature, and its focus on the interface of stress, pain and emotion in health and disease.

Friday, January 21, 2005

Basic And Translational Science Symposium

8:30 a.m. - 1:00 p.m. — Morning Scientific Program

8:30 a.m. – 9:30 a.m. — State of the Art Lecture

- Introduction: **Yvette Taché, Ph.D.**
- **Margaret Chesney, Ph.D.** – Mind Brain Body Interactions: The NCCAM Perspective – *Associate Director, National Center for Complementary and Alternative Medicine (NCCAM)*

9:30 a.m. - 10:45 a.m. — Theme I: Central Modulation Of Immune Function, Chairs: **Francesco Chiappelli, Ph.D.** and **Michael Irwin, M.D.**

9:30 a.m. – 10:00 a.m. — Keynote Presentation I

- **John Sheridan, Ph.D.** – Neuroendocrine regulation of innate and adaptive immunity – *Department of Oral Biology, Ohio State University*

10:00 a.m. - 10:45 a.m. — Three 10 min presentations (+5 min discussion) by:

- **Catherine Rivier, Ph.D.** – Prenatal stress alters hypothalamic nitric oxide responses to a systemic immune challenge in adult offspring – *Peptide Biology Laboratory, Salk Institute*
- **Steve Cole, Ph.D.** – Social regulation of HIV gene expression – *Hematology & Oncology, UCLA Department of Medicine*
- **Paolo Prolo, M.D.** – Circadian rhythms and immune function – *UCLA School of Dentistry*

10:45 a.m. - 11:00 a.m. — Break

UNC Research Day, continued from page 16

- **Steve Heymen, MS** – *Instructor in Medicine, UNC School of Medicine, Chapel Hill, NC* – Randomized controlled trials of biofeedback for the treatment of fecal incontinence and outlet-dysfunction constipation
- **Anthony Visco, MD** – *Prof of Medicine, UNC School of Medicine, Chapel Hill, NC* – Pelvic floor disorders

12:30-1:30pm — Lunch Break

1:30-2:30pm — Hypnosis

- **Peter J. Whorwell, MD** – *Senior Lecturer/Prof. in Gastroenterology, University Hospital of South Manchester, Manchester, UK* – Hypnosis treatment for IBS – the Manchester model
- **Olafur S. Palsson, PsyD** – *Associate Prof. of Medicine, UNC School of Medicine, Chapel Hill, NC* – Hypnosis treatment for IBS – the North Carolina model
- **Miranda Van Tilburg, PhD** – *Assistant Prof. of Medicine, UNC School of Medicine, Chapel Hill, NC* – Treating pediatric IBS with self-hypnosis

2:30-3:30pm — Patient Education

- **Debra Roter, MPH, DrPH** – *Professor, Department of Health Policy and Management, Johns Hopkins School of Public Health, Baltimore, MD* – Overview of educational research and the physician-patient interaction
- **Albena Halpert, MD** – *Clinical Instructor, Boston University medical Center, Boston, MA* – Ongoing research in patient education

3:30-4:30pm — Pediatric FGIDs

- **Rona L. Levy, PhD** – *Professor, University of Washington, Seattle, WA* – Intergenerational transmission of the FGIDs: Nature or nurture?
- **Denesh Chitkara, MD** – *Assistant Prof. of Pediatrics, UNC School of Medicine, Chapel Hill, NC* – Functional dyspepsia in children: Is this one disorder or many?

For further information and to RSVP, please contact Kirsten Nyrop at knyrop@med.unc.edu

UCLA Symposium, continued from page 16

11:00 a.m. – 12:15 p.m. — Theme II: Central Modulation Of Pain

Chairs: **Paul Micevych, Ph.D.** And **Juan Carlos Marvizon, Ph.D.**

11:00 a.m. – 11:30 a.m. — Keynote Presentation II

- **M. Catherine Bushnell, Ph.D.** – *Neural Correlates of Intrinsic Pain – McGill Centre for Research on Pain, McGill University, Montreal, Canada*

11:30 a.m. – 12:15 p.m. — Three 10 min presentations (+5 min discussion):

- **Jennifer Labus, Ph.D.** – *Central networks involved in the modulation of visceral pain – UCLA Department of Psychiatry*
- **Jon-Kar Zubieta, M.D., Ph.D.** – *Modulation of the central opioid response: Emotional challenge and placebos – Department of Psychiatry, University of Michigan, Ann Arbor*
- **James A. McRoberts, Ph.D.** – *Peripheral NMDA receptors: Gatekeepers of visceral pain – UCLA Department of Medicine*

12:15 p.m. - 12:35 p.m. — Roundtable Discussion (key note presenters and selected local individuals)

Chair: **Igor Spigelman, Ph.D.**

12:40 p.m. - 1:30p.m. — Lunch

1:30 p.m. - 2:15 p.m. — Posters and dessert

2:30 p.m. - 2:45 p.m. — **Emeran Mayer, M.D.** – *State of the CNS/WH Center – Director, Center for Neurovisceral Sciences & Women's Health, UCLA*

2:45 p.m. - 4:30 p.m. — Theme III: Memory And Emotion Regulation

Chair: **Michael Fanselow, Ph.D.**

2:45 p.m. - 3:15 p.m. — Keynote Presentation III – **Michael Fanselow, Ph.D.** – *Stress-Induced Enhancement of Fear Learning: An Animal Model of Post Traumatic Stress Disorder – UCLA Department of Psychology*

3:15p.m. - 4:00 p.m. — Three 10 min presentations (+5 min discussion)

- **Mark Barad, M.D., Ph.D.** – *Neurotransmission in fear extinction – UCLA Department of Psychiatry & Biobehavioral Sciences*
- **Alcino Silva, Ph.D.** – *Molecular and cellular cognition: Remote memory – UCLA Department of Neurobiology and Psychology*
- **Russell Poldrack, Ph.D.** – *Memory system interactions and prefrontal regulation – UCLA Department of Psychology*

4:00 p.m. - 4:30 p.m. — Roundtable Discussion (key note presenters + selected local individuals)

Chairs: **Mark Barad, M.D., Ph.D.** and **Susan Bookheimer, Ph.D.**

Saturday, January 22, 2005

Clinical Education Program

**Functional Gastrointestinal Disorders and Co-Morbid Conditions
Migraine Headaches, Fibromyalgia, and Interstitial Cystitis**

8:30 a.m. - 8:40 a.m. — Introduction and Overview – **Lin Chang, M.D.**
-- *Program Chair, UCLA Department of Medicine*

8:40 a.m. - 12:45 p.m. — Overview of Functional GI Disorders
Moderator: **Kirsten Tillisch, M.D.**

8:45 a.m. - 9:15 a.m. — Overlap of Chronic Functional Pain Syndromes
– **Lin Chang, M.D.** -- *UCLA Department of Medicine*

9:15 a.m. - 9:45 a.m. — Health Related Quality of Life in Functional GI Disorders – **Brennan Spiegel, M.D.** – *UCLA Department of Medicine*

9:45 a.m. - 10:30 a.m. — Evolving Concepts of Overlapping Chronic Pain Syndromes – **Emeran Mayer, M.D.** – *UCLA Department of Medicine*

10:30 a.m. - 10:45 a.m. — Break

10:45 a.m. - 12:45 p.m. — Co-Morbid Extraintestinal Disorders
Moderator: **Tony Buffington, M.D.**

10:45 a.m. - 11:15 a.m. — Diagnosis and Management of Migraine Headaches – **Andrew Charles, M.D.** – *UCLA Department of Neurology*

11:15 a.m. - 11:45 a.m. — Diagnosis and Management of Fibromyalgia – **Daniel Wallace, M.D.** – *Cedars Sinai Medical Center Division of Rheumatology*

11:45 a.m. - 12:15 p.m. — Diagnosis and Management of Interstitial Cystitis – **Larissa Rodriguez, M.D.** – *UCLA Department of Urology*

12:15 p.m. - 12:45 p.m. — Somatization in Functional GI Disorders
– **Bruce Naliboff, Ph.D.** – *UCLA Department of Medicine*

FBG Committees – Reports

MEMBERSHIP

Chair: Max Schmulson

We are now more than 600 members from around the world with new members joining steadily. We need to keep expanding our membership. Our group is an interesting and attractive organization that is now one of the supporters of Neurogastroenterology and Motility, a journal that will be available on line for our members. Also, a membership certificate has been designed and will be sent out to all members. We encourage you to identify professionals in your area of influence including gastroenterologists, psychologists, epidemiologists, surgeons, psychologists, neurologists, psychiatrists, and all other health care professionals interested in functional gastrointestinal disorders. We continue to offer a free first year to new members. Payment of dues by credit card is possible. Please send out the membership drive letter and application form (available from Deb Geno) to all of those you think may be interested in joining the FBG. It can be filled out and sent by e-mail, fax or mail. Your effort is essential in increasing our membership.

AWARDS

Chair: Rona Levy

The Awards Committee accepted nominations for Research Scientist, Young Investigator and Travel Awards until April 1. There was a review process to select recipients and notifications are sent out. Awards will be presented at the FBG Meeting at DDW. (Please see Young Investigator Awards article in this newsletter.)

NOMINATING

Chair: Kevin Olden

After DDW this May, two new members will join the FBG Council for a 2-year term. Current council members include:

- Brian Lacy, MD, PhD -- Dartmouth-Hitchcock Medical Center, Lebanon, NH
- Fermin Mearin, MD -- Institute of Functional & Motor Digestive Disorders, Barcelona, Spain
- Current Council:
- Lin Chang, MD – UCLA Ctr. for Neurovisceral Sciences & Women's Health, Los Angeles, CA
- Adil Bharucha, MD – Mayo Clinic, Rochester, MN
- William Chey, MD -- Univ. of Michigan Medical Ctr., Ann Arbor, MI (rotating off)
- Emeran Mayer, MD -- UCLA Ctr. for Neurovisceral Sciences & Women's Health, Los Angeles, CA (rotating off)

PUBLIC POLICY

Chair: Andrew Feld

No activity to report for the last year. Members include: L Chang, W Chey, F Cremonini, R Levy, and A Ward.



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New Members

Hamid Akbarali,
PhD, *Oklahoma
City, OK*

Jaime Belkind-
Gerson, MD, MSc
Laredo, TX

Paul Brundage, MD
Jackson, TN

Brendan Drumm,
MD, *Dublin, Ireland*

Christophe Faure,
MD, *Montreal,
Canada*

Frank Friedenberg,
MD, *Philadelphia,
PA*

Norman Gilinsky,
MD, *Cincinnati, OH*

Norman Godin, MD
*Geneva,
Switzerland*

Paul Harris, MD
Santiago, Chile

Scott Harris,
PharmD, *Little
Rock, AR*

Seamus Hussey,
MD, *Dublin, Ireland*

Adeyemi Lawal, MD
Milwaukee, WI

Marie-Claude
L'Heureux, MS, PhD
Toronto, Canada

Cheryl Little, MD
Nashville, TN

Anna Malykhina,
PhD, *Oklahoma
City, OK*

Fran Menard, MBA
Lake Success, NY

Adrian Miranda, MD
Milwaukee, WI

Jai Mirchandani,
MD, *New York, NY*

Jenny Molano, MD
Bogota, Colombia

Hayat Mousa, MD
Columbus, OH

Samiappan
Muthusamy, MD
Union, NJ

Ann Ouyang, MD
Hershey, PA

Jyoti Sengupta,
PhD, *Milwaukee,
WI*

Eldon Shaffer, MD,
FRCPC, *Calgary,
Canada*

Toku Takahashi,
MD, PhD
Durham, NC

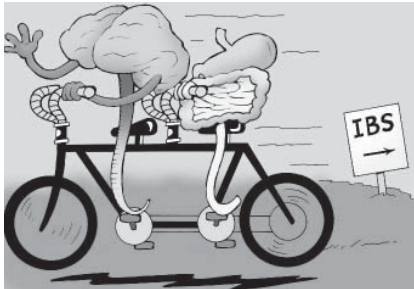
Myliisa Trowbridge,
MD, *Mason, OH*
Lukas Van

Oudenhove, MD
Leuven, Belgium

Subodh Varshney,
MD, *Bhopal, India*

Nathaniel S.
Winstead, MD, MS
Birmingham, AL

Helena Wrzos, MD
Hershey, PA



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P. Hyman — from page 13

psychotherapy, family psychotherapy, and all the extras. Another important goal is training curious minds. It is my great pleasure to mentor students, residents and research nurses so that everyone gets to present at the AGA annual meeting.

It was a surprise and honor that Doug Drossman and Andree Rasquin chose me to chair the first pediatric Rome working team. I enjoyed returning as co-chair for the infant/toddler working team last year.

Overall, I am content that I went as far as I could as fast as I could. Future goals? I would like to have 100 peer-reviewed publications before I croak. I would like to publish in JCI and the New Yorker. Most importantly, I would like to see, smell and hold a grandchild.

Paul E. Hyman, MD, is Chief of Pediatric Gastroenterology, University of Kansas, Lawrence, KS.

Mark Your Calendars:

The 16th Annual Meeting of the Functional Brain-Gut Research Group (FBG) will be held during Digestive Diseases Week (DDW) in Chicago on Tuesday, May 17, 2005, at the Palmer House Hilton. The FBG Meeting/Reception will be from 5:15 to 7:00pm in the Monroe Ballroom.

FBG Members on the Move

- Alben Halpert, MD, is now directing the functional GI and motility program at Boston Medical Center, Boston University School of Medicine
- Kevin Olden, MD, FACP, FACG, FAPA – has relocated to the Division of Gastroenterology at the University of South Alabama in Mobile