But the new program also provides a better way for U-M IBS researchers to find participants for clinical trials of new treatments, such as those led by William Chey, MD and Richard Saad, MD. Studies led by William Hasler, MD, Chung Owyang, MD and John Wiley, MD that examine the basic pathophysiologic foundations of IBS, and characterize subtypes of IBS, will also be aided by the ready presence of potential participants.

Data from the clinic will be used to evaluate the efficacy of various diagnostic and treatment approaches, and to assess the costs associated with IBS, in studies led by Phillip Schoenfeld, MD.

This innovative approach to IBS, combining evidence-based care with advanced research, may become a model for other centers. Millions of Americans with IBS are seeking effective treatment for a condition that has only recently become popularly recognized—and researchers are seeking better answers for why they suffer and what can be done about it.

Confronting the Rising Tide of Food Allergy

A growing percentage of American children and adults have food allergies, making them susceptible to serious allergic reactions and, in some cases, putting them at risk of death if they’re exposed to peanuts, tree nuts, milk, soy, wheat, shellfish, eggs or other foods.

As many as eight percent of children, and two percent of adults, in the United States have food allergies—and an estimated 150 Americans die from food-related anaphylaxis each year.

To address this growing public health issue, the Division of Allergy & Clinical Immunology created the Food Allergy Service (FAS). Currently the FAS is progressing into its second year with Marc McMorris, MD as director.

During the first year of its existence, the FAS focused on clinical needs. Patient education materials were created and standardized throughout all Allergy clinics. Collaboration was initiated with the Health Education Resource Center at the U-M East Ann Arbor Health Center to increase public availability of educational materials related to allergies and asthma. A FAS website (www.med.umich.edu/foodallergy) was produced as a community outreach tool.

Food allergy and anaphylaxis training sessions continued to be offered to Michigan schools and preschools. Procedures related to providing open food challenges were assessed and expanded.

The Allergy Division collaborated with Educational Services for Nursing and the U-M Medical School to hold their first Allergy Update Conference in May of 2005. Objectives for the second year include development of a Food Allergy Center and advancements in research and clinical activities. Anne Russell BSN, RN, serves as food allergy program coordinator, a position funded by the Food Allergy Initiative of New York.

Increased serotonin expression (bright green) in intestinal cells of an IBS patient.
James R. Baker Jr, MD
Division Chief/Professor

Professor Emeritus
James A. McLean, MD
William R. Solomon, MD (Active)
Chung Wu, MD

Associate Professor
Brian D. Athey, PhD
James L. Baldwin, MD
Marc S. McMorris, MD

Clinical Assistant Professor
Cem Akin, MD, PhD
Georgiana M. Sanders, MD, MS

Adjunct Clinical Assistant Professor
Bernard L. Gold, MD

Clinical Instructor
Deborah A. Oberdoerster, MD
Andrew M. Singer, MD

Research Assistant Professor
Anna U. Bielinska, PhD
Andrzej Myc, PhD
Thommey P. Thomas, PhD
Su He Wang, PhD

Research Investigator
Jolanta F. Kukowska-Latallo, PhD
Istvan J. Majoros, PhD
Rameshwer Shukla, PhD
Xiangyang Shi, PhD
Probing the Mysteries of Mastocytosis

The human body’s immune system relies heavily on tiny sentinels called mast cells, which respond to invading particles and microbes by sounding a physiological alarm: the release of histamine that triggers further immune response.

But in some people, the mast cell system is overzealous, producing far too many cells and triggering far too intense a response. Symptoms can range from skin rashes to life-threatening anaphylactic shock that comes on for no apparent reason.

This condition, called mastocytosis, is still not well understood—and many patients go for years without proper diagnosis or treatment. There’s no cure or fully effective treatment for its most rare and debilitating forms, and the root causes of all its forms are still unclear.

The Division of Allergy and Clinical Immunology has developed one of the nation’s few programs specializing in diagnosing, treating and studying mastocytosis and related mast cell disorders.

In 2005, the program’s first full year, Cem Akin, MD, and his team diagnosed and prescribed treatment and monitoring for many patients. Working with members of the Comprehensive Cancer Center, the group performed the detailed bone marrow examinations needed to identify mast cell disorders.

Akin and his laboratory team are also performing molecular studies on patient samples, identifying genetic mutations that may be useful in targeting future treatments. His efforts are funded in part by an extraordinary grant from The Mastocytosis Society, which raised $44,000 from individual donations given by people with the disease.

Because mastocytosis is caused by mutations in a gene that encodes an enzyme called tyrosine kinase (TK), Akin and his colleagues are hopeful that TK inhibitor drugs used in other diseases might be useful against mast cell disorders. The first clinical research protocols will begin soon.

Even as this bench-to-bedside research continues, Akin is playing a crucial role in helping the national and international medical communities standardize both the clinical descriptions of mastocytosis and other mast cell disorders, and the diagnostics used to distinguish them from other conditions. As co-organizer of an international conference in Vienna in November, and as the co-chair of the mastocytosis task force of the American Academy of Allergy, Asthma and Immunology, Akin hopes these efforts will give other physicians the tools needed to help mastocytosis patients worldwide.