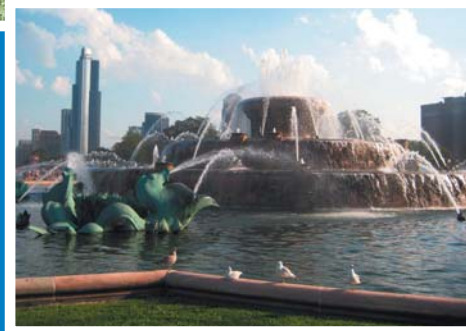


Pediatric Gastroenterology, Hepatology and Nutrition Fellowship Program




Children's[®]
Memorial
Hospital

Where kids come first.[®]

Chicago, IL

Barry K. Wershil, MD

Division Head,
Gastroenterology, Hepatology and Nutrition

Jeffrey B. Brown, MD

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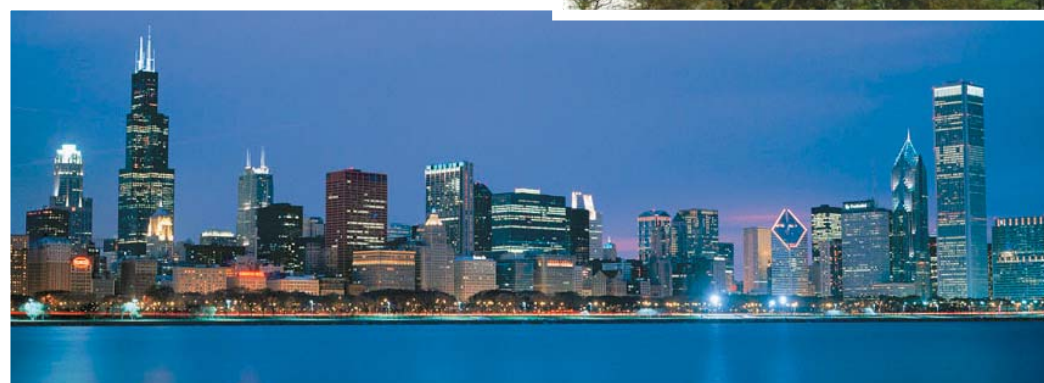
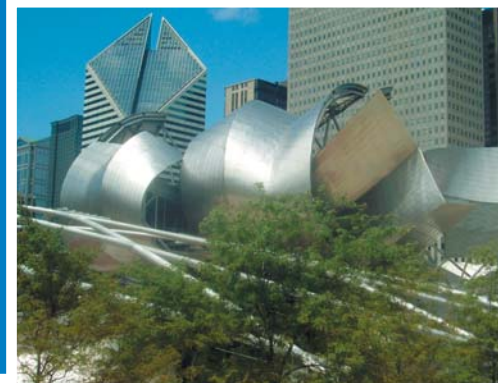


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Welcome from Dr. Wershil

Greetings and thank you for your interest in our Fellowship Program in Pediatric Gastroenterology, Hepatology and Nutrition. Our mission is to train academic pediatric gastroenterologists and hepatologists who will go on to become the thought leaders in our field. Our curriculum was developed to provide an intensive and comprehensive exposure to all the essential elements that are required of today's active subspecialist.



The first year is predominantly clinically based with an exposure to a vast array of gastrointestinal and liver diseases. As well, the fellow will acquire a broad array of procedure skills necessary for competency. During the first year, plans are developed for the second and third years which are more research-orientated. The Division has a tremendous depth of activity in both basic and clinical research to draw upon. Research opportunities are also available at the Children's Memorial Research Center, the Department of Medicine, and Northwestern University's Feinberg School of Medicine. Our job is to help guide the fellows to the mentors that will best serve their individual goals. In the end, we take great pride in the accomplishments of our fellows and their professional development as they move on to successful careers.

We look forward to the selection process and encourage you to contact us with any questions or issues that might arise. Again, thank you for considering our program and the best of luck in your future endeavors.

A handwritten signature in white ink that reads "Barry Wershil, MD". The signature is written in a cursive, flowing style.

Barry K. Wershil, MD
Division Head, Gastroenterology, Hepatology and Nutrition, Children's Memorial Hospital
Professor, Northwestern University, Feinberg School of Medicine

Program Overview

The educational mission of the Pediatric Gastroenterology, Hepatology and Nutrition Fellowship Training Program at Children's Memorial Hospital and Northwestern University's McGaw Medical Center is to provide trainees with the experiences necessary to become academic pediatric gastroenterologists or hepatologists. To do this, we focus on a comprehensive clinical, procedural, research, and educational experience that will allow the trainee to develop the necessary skills to become a leader in the field of Pediatric Gastroenterology, Hepatology and Nutrition. This fellowship is fully accredited through the Accreditation Council for Graduate Medical Education and meets the training requirements of the American Board of Pediatrics for subspecialty certification in Pediatric Gastroenterology.

The three year fellowship program consists of 12 months of clinical education and 24 months of research experience. The first year of the program predominantly involves the acquisition of clinical and procedural skills and participation in teaching responsibilities, but also introduces the trainee to various aspects of clinical and basic research methodology. Over the next two years, there is increased time committed to research, while new teaching and administrative tasks are assumed. Some activities are common to all years of fellowship training. Throughout the three years, fellows are required to attend the key departmental, division, and joint fellowship conferences as part of their core educational experience. Administrative responsibilities include scheduling some of these educational activities and maintaining the teaching file for the ambulatory practice.

First Year

During the first year of fellowship, fellows spend the majority of their time involved in the inpatient and outpatient services. First year fellows have primary clinical responsibility for inpatients (either on the GI or liver service). In addition, fellows perform consultations, attend outpatient clinics, and participate in any and all procedures deemed necessary for patients they evaluate on the inpatient service or in clinic. Fellows participate in weekly divisional conferences and are expected to present in these conferences on average twice per month. During the second half of the year, fellows are given a one-month elective period to begin formulating a research project to pursue during the following two years of fellowship. In addition, fellows would use that period to select a mentor and scholarly oversight committee, and, if necessary, formulate an IRB proposal.

Inpatient Service: 11 months

Call: 8-10 weeks of call per academic year

Clinics: 2-3 sessions per week

Second Year

The majority of time in the second year is devoted to research. Fellows begin work on the project chosen in the latter part of their first year and are encouraged to write a review article and/or case report during the second year of fellowship. Some additional administrative duties are assigned to second year fellows such as scheduling and organizing the monthly Pathology and Radiology Conferences. Fellows see new and established patients in clinic and typically rotate on the inpatient service for 4-6 weeks during the year. Fellows participate in any and all procedures deemed necessary for patients they see in clinic or during their inpatient coverage. Second year fellows have increased responsibility for teaching residents rotating on the GI service, including providing occasional didactic sessions on common GI problems.

Inpatient Service: 4-6 weeks per academic year

Call: 8-10 weeks of call per academic year

Clinics: 2 sessions per week

Third Year

The emphasis for the third year remains research. Fellows are expected to have at least one research project ready to be submitted as an abstract and presented at a national meeting. Fellows are also encouraged to write and submit a research grant. Fellows see new patients as well as follow established patients in clinic and typically rotate on the inpatient service for 2-4 weeks during the year. Fellows participate in any and all procedures deemed necessary for patients they see in clinic or during their inpatient coverage. Third year fellows have even greater responsibility for teaching residents and medical students rotating through the division. Senior fellows are often called upon to give lectures to the pediatric residents and students and many continue as faculty facilitators at the medical school as well.

Inpatient Service: 2-4 weeks per academic year

Call: 8-10 weeks of call per academic year

Clinics: 2 sessions per week

Additional Training Opportunities

A fourth year program has been developed specifically for advanced training in Pediatric Transplant Hepatology under the direction of Dr. Estella Alonso. This training program is not part of the core Pediatric Gastroenterology, Hepatology and Nutrition Fellowship and requires completion of a three-year Pediatric Gastroenterology Fellowship and an application to the program, which is granted on a competitive basis. This additional year of training is recommended for individuals interested in a career in Hepatology and Liver Transplantation.

Recently, the Accreditation Council for Graduate Medical Education began offering accreditation for Pediatric Transplant Hepatology, and an application for accreditation has been submitted for this program. The program includes a curriculum that fulfills eligibility requirements of the American Board of Pediatrics for the newly offered subspecialty certification in Pediatric Transplant Hepatology. This one-year fellowship will provide six months of inpatient coverage of the Hepatology/Transplant service and will participate in weekly Hepatology and Liver Transplant clinics. In addition, the fellow will participate in the pre-operative evaluation of patients for liver transplant as well as the post-operative management. During the six months the fellow is not involved with the inpatient service, they will be expected to conduct clinical or basic science research in the area of Hepatology or Transplantation Medicine. They will also be called upon to give lectures to the pediatric GI fellows, residents and medical students throughout the duration of this fellowship.

Academic Program

The weekly "Fellows Conference" is the principal meeting for the purpose of stimulating the active interchange of information and ideas among the fellows. The program director facilitates the conference and any faculty and staff are welcomed to attend. Case related discussion, literature reviews, research topics, etc., take place in round-table fashion. The topics and literature are assigned well in advance, allowing the meeting to serve as a discussion of conflicting data and to cement ideas. All fellows are required to attend.

Fellows also participate in the following other conferences:

Divisional Conferences:

- Journal Club – once per month
- Clinical Subject Review – once per month
- Research Conference – once per month
- Radiology Conference – once per month
- Clinical Case Conference – once per month
- GI Pathology Conference – three times per month
- Hepatology Pathology Conference – once per month
- Transplant Team Meeting – weekly
- Transplant M&M – monthly
- Faculty Peer Review (case conference) – quarterly

Departmental Conferences:

- Pediatric Grand Rounds – weekly
- Firm Rounds – weekly

Our philosophy is that writing manuscripts and grants at an early stage during fellowship is absolutely essential to the development of an academic career. Fellows are urged to write and publish clinically-oriented manuscripts during the clinical year and to publish results of research projects in subsequent years. Most fellows publish 2-4 clinical papers, including case reports and clinical studies, and 1-2 designed research papers, by the completion of fellowship.

Teaching skills are developed and improved by giving lectures to students and residents throughout the course of fellowship. A member of the faculty often sits in on these lectures to provide feedback on the quality and method of presentation. Fellows also present regularly at divisional conferences (i.e., journal club, clinical case conferences, and research conferences), which serves to strengthen skills in verbal presentation that would lead to presenting at one or more national meetings.

About the Division of Gastroenterology, Hepatology and Nutrition

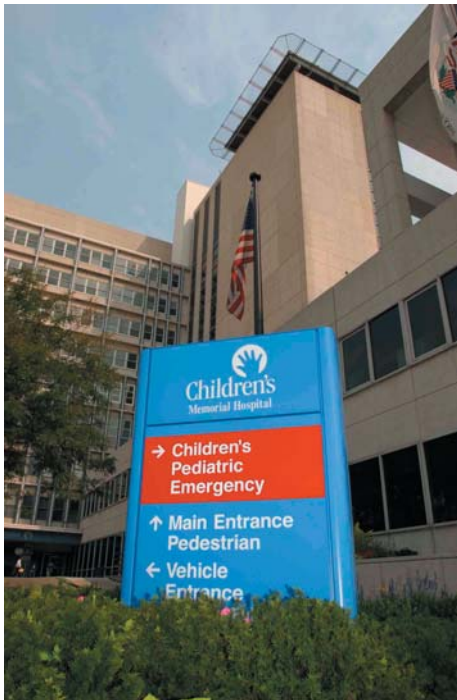
Divisional Overview

The Division of Gastroenterology, Hepatology and Nutrition at Children's Memorial Hospital is committed to the education and professional development of its fellows. There are twelve full time attending physicians in the division and all hold faculty appointments within the Department of Pediatrics at Northwestern University's Feinberg School of Medicine.

The senior faculty members collectively have more than 60 years of experience teaching in this subspecialty. Dr. Barry K. Wershil, Division Head, has more than 20 years of experience in training Pediatric Gastroenterology fellows. Dr. Peter F. Whittington, Director of the Siragusa Transplantation Center, is a leader in the field of Pediatric Hepatology and Transplant Hepatology and has been training subspecialists for more than 30 years. Dr. Estella M. Alonso, Medical Director of Liver Transplantation, provides more than 15 years of experienced leadership and education in the field of Pediatric Hepatology and Liver Transplantation. The division also has an experienced and dedicated nursing and clinical nutrition staff.



The inpatient services are divided into Gastroenterology/Nutrition and Hepatology. On the Gastroenterology service, the typical daily census is 4-8 patients, and the service averages 6-8 consults per week. The average daily census on the Hepatology inpatient service is 4-8 patients, including 2-4 post-transplant patients, and the service averages about 2-4 consults per week.



The main hospital and outpatient center are located in the Lincoln Park neighborhood in Chicago. Fellows attend outpatient clinics at those two locations. The Division also has satellite gastroenterology outpatient clinics in six suburban partner locations: Arlington Heights, Glenview, Lake Forest, Tinley Park, Westchester, and Winfield.

The division has approximately 6,000 patient visits in the outpatient setting per year. About two-thirds of those patients are from the Chicago/upper Midwest region, while the rest are from a wide geographic area, including many national and international referrals. Pediatricians and Gastroenterologists refer the majority of patients for tertiary services. Some of the more common diagnoses encountered in our general GI clinics are gastroesophageal reflux, failure to thrive, recurrent abdominal pain, constipation, celiac disease, and allergic bowel disorder.

We also have subspecialty clinics in functional gastrointestinal and motility disorders, inflammatory bowel disease, eosinophilic esophagitis and allergic bowel disease, and intestinal failure. The most frequent diagnoses of patients seen in the hepatology outpatient clinic include neonatal hepatitis, cholestasis, biliary atresia, chronic active hepatitis, cirrhosis, and allograft dysfunction.



Division of Gastroenterology, Hepatology and Nutrition Faculty Members



Barry K. Wershil, MD

Professor, Northwestern University, Feinberg School of Medicine
Division Head, Gastroenterology, Hepatology and Nutrition, Children's Memorial Hospital
Attending Physician, Children's Memorial Hospital

Dr. Wershil completed a Pediatric Residency and Chief Residency at St. Louis Children's Hospital in St. Louis, MO. He completed a Pediatric Gastroenterology Fellowship at Massachusetts General Hospital and Children's Hospital in Boston, MA, and a Research Fellowship in the Department of Pediatrics at Harvard Medical School in Boston, MA.
Clinical interests: Eosinophilic Esophagitis, Inflammatory Bowel Disease
Research interests: Eosinophilic Esophagitis, Mast cell function in the GI tract

Selected Recent Publications:

Morganstern JA, Wang M-y, Wershil BK. Direct evidence of mast cell participation in acute acid-induced esophageal inflammation in mice. *J Pediatr Gastro Nutr* 2008;46:134-8.

Furuta GT, Wershil BK. Gastrointestinal mucosal immunity. *J Allergy Clin Immunol* 2008;121(Suppl 2):S380-4.

Liacouras CA, Bonis P, Putnam PE, Straumann A, Ruchelli E, Gupta AK, Lee JJ, Hogan SP, Wershil BK, Rothenberg M, Ackerman SJ, Gomes I, Murch S, Mishra A, Furuta GT. Summary of the first international gastrointestinal eosinophil research symposium. *J Pediatr Gastro Nutr*, 2007;45:370-391.

Saban R, Simpson C, Davis CA, Dozmorov I, Maier J, Fowler B, Ihnat MA, Hurst RE, Wershil BK, Saban MR. Transcription factor network downstream of protease activated receptors (PARs) modulating mouse bladder inflammation. *BMC Immunol* 2007;8:17.

Marciano T, Wershil BK. The ontogeny and developmental physiology of gastric acid secretion. *Curr Gastroenterol Rep* 2007;9(6):479-81.



Jeffrey B. Brown, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Director, Fellowship Training Program, Gastroenterology, Hepatology and Nutrition
Attending Physician, Children's Memorial Hospital

Dr. Brown completed a Pediatric Residency program and Pediatric Gastroenterology Fellowship at Children's Memorial Hospital in Chicago, IL.

Clinical interest: Inflammatory Bowel Disease

Research interests: Inflammatory Bowel Disease, specifically laboratory investigation of intestinal lymphocyte trafficking in models of inflammatory bowel disease and the relationship of inflammation, intestinal stem cells, and colon cancer.

Selected Recent Publications:

Brown JB, Lee G, Grimm GR, Barrett TA. The therapeutic benefit of pentostatin in severe IL-10^{-/-} colitis. *Inflamm Bowel Dis* 2008;14(7):880-887.



Estella M. Alonso, MD

Professor, Northwestern University, Feinberg School of Medicine
Medical Director of Liver Transplantation, Children's Memorial Hospital
Attending Physician, Children's Memorial Hospital

Dr. Alonso completed a Pediatric Residency program at Children's Memorial Hospital in Chicago, IL. She completed a Pediatric Gastroenterology Fellowship at the University of Chicago in Chicago, IL, and a Research Fellowship in the Liver Research Laboratory at the University of Southern California in Los Angeles, CA.

Clinical interests: Liver disease and transplantation, acute liver failure, biliary atresia, and primary sclerosing cholangitis

Research interests: Rehabilitation and outcome after liver transplantation, acute liver failure, primary sclerosing cholangitis, and transplant tolerance

Selected Recent Publications:

Alonso EM, Growth and developmental considerations in pediatric liver transplantation. *Liver Transpl* 008;14(5):585-91.

Bucuvalas JC, Alonso EM. Long term outcomes after liver transplantation in children. *Curr Op in Organ Transpl* 2008;13(3):247-251.

Hathout E, Alonso EM, Anand R, Martz K, Imseis E, Johnston J, Lopez J, Chinnock R, McDiarmid S. Post-transplant diabetes mellitus in pediatric liver transplantation. *Pediatric Transpl* 2007 Dec 30 [Epub ahead of print].

Sundaram SS, Landgraf JM, Neighbors K, Cohn RA, Alonso EM. Adolescent Health Related Quality of Life Following Liver and Kidney Transplantation. *Am J Transplant* 2007;7:982-9.

Sunku B, Salvalaggio PR, Donaldson JS, MD, Rigsby CK, Neighbors K, Superina RA, Alonso EM. Outcomes and risk factors for failure of radiologic treatment of biliary strictures in pediatric liver transplant recipients. *Liver Transpl* May 2006;12(5):821-6.

Mack CL, Zelko FA, Lokar J, Superina R, Alonso EM, Blei AT, Whittington PF. Surgically restoring portal blood flow to the liver in children with primary extrahepatic portal vein thrombosis improves fluid neurocognitive ability. *Pediatrics* 2006;117(3):e405-12. Epub 2006 Feb 15.

Squires RH, Shneider BL, Bucuvalas J, Alonso EM, Sokol RJ, Narkewicz MR, Dahwan A, Rosenthal P, Rodriguez-Baez N, Murray KF, Horslen S, Martin MG, Lopez MJ, Soriano H, McGuire BM, Jonas M, Yazigi N, Shepherd RW, Schwarz K, Lobritto S, Thomas DW, Lavine JE, Karpen S, Ng V, Kelly D, Simonds N, Hynan LS. Acute liver failure in children: the first 348 patients in the pediatric acute liver failure study group. *J Pediatr* 2006;148:652-658.

James LP, Alonso EM, Hynan LS, Hinson JA, Davern TJ, Lee WM, Squires RH. Pediatric Acute Liver Failure Study Group. Detection of acetaminophen protein adducts in children with acute liver failure of indeterminate cause. *Pediatrics* 2006;118(3):e676-81.



Lee Bass, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children's Memorial Hospital

Dr. Bass completed a Pediatric Residency and Chief Residency at St. Louis Children's Hospital in St. Louis, MO. He completed a Pediatric Gastroenterology, Hepatology and Nutrition Fellowship at Children's Memorial Hospital in Chicago, IL.

Clinical interests: Gastroesophageal reflux, cholestatic liver disease, primary sclerosing cholangitis with Inflammatory Bowel Disease, autoimmune liver disease, and liver transplantation

Research interest: Pediatric cholestatic liver disease



Valeria C. Cohran, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Clinical Practice Director, Division of Gastroenterology, Hepatology and Nutrition,
Children’s Memorial Hospital
Medical Director, Small Bowel Transplantation and Intestinal Rehabilitation Program,
Children’s Memorial Hospital
Attending Physician, Children’s Memorial Hospital

Dr. Cohran completed a Pediatric Residency program, Pediatric Gastroenterology Fellowship, and an Advanced Clinical Research Fellowship at Cincinnati Children’s Hospital Medical Center in Cincinnati, OH.

Clinical interests: Intestinal rehabilitation and transplantation

Research interest: Outcomes in transplantation, specifically stem cell activation and its role in intestinal adaptation

Selected Recent Publications:

Cohran VC, Griffiths M, Heubi JE. Bone Mineral Density in children exposed to Chronic Glucocorticoid Therapy. Clin Pediatr 2008;47(5):469-75.

Sentongo TA, Cohran V, Korff S, Sullivan C, Iyer K, Zheng X. Intestinal Permeability and Effects of LGG therapy in children with Short Bowel Syndrome. J Pediatr Gastroenterol Nutr 2008;46(1):41-7.

Chungfat N, Dixler I, Cohran V, Buchman A, Abecassis M, Fryer J. Impact of parenteral nutrition-associated liver disease on intestinal transplant waitlist dynamics. J Am Coll Surg Dec 2007;205(6):755-61.



Udeme D. Ekong, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children’s Memorial Hospital

Dr. Ekong completed a Pediatric Residency program at Lincoln Medical Center in New York, NY. She completed a Pediatric Gastroenterology Fellowship at Children’s Hospital of New York in New York, NY, and an Advanced Hepatology Fellowship at Children’s Memorial Hospital in Chicago, IL.

Clinical interests: Liver disease in children and pediatric liver transplantation

Research interest: Immune tolerance in liver transplantation.

Selected Recent Publications:

Ekong UD, Melin-Aldana H, Whittington PF. Regression of severe fibrotic liver disease in 2 children with neonatal hemochromatosis. J Pediatr Gastroenterol Nutr 2008;46(3):329-33.

Ekong UD. The treatment conundrum of neonatal hemochromatosis. Pediatr Transpl June 2007; 11(4):347-348.

Ekong UD, Zeng S, Hao-Dun, Feirt N, Guo J, Ippagunta N, Guarrera JV, Lu Y, Weinberg A, Qu W, Ravichandran R, Schmidt AM, Emond JC. Blockade of RAGE attenuates acetaminophen-induced hepatotoxicity in mice. J Gastroenterol and Hepatol 2006;21(4):682-8.



Mark H. Fishbein, MD

Associate Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children's Memorial Hospital

Dr. Fishbein completed both a Pediatric Residency program and Pediatric Gastroenterology Fellowship at the University of Chicago in Chicago, IL.

Clinical interests: Feeding aversion and feeding disorders

Research interests: Nonalcoholic fatty liver disease, quality of life for families of children with feeding disorders, and the relationship between grocery shopping and obesity

Selected Recent Publications:

Fishbein M, Bernard B, Ehrlich C. The Primary Care Physician's Approach to Functional Abdominal Pain in Childhood. *J Clin Gastroenterol* 2006;40(6):497-503.

Fishbein M, Cox S, Swenny C, Mogren C, Walbert L, Fraker C. Food Chaining: A Systematic Approach for the Treatment of Children with Feeding Aversion. *Nutr Clin Pract* 2006;21:182-184.

Fishbein M, Mogren C, Gleason T, Stevens WR. The Relationship of Adipose Tissue Distribution to Hepatic Steatosis in Pediatric Nonalcoholic Fatty Liver Disease. *J Pediatr Gastroenterol Nutr.* 2006;42(1):83-8.



Maria T. Greene, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children's Memorial Hospital

Dr. Greene completed a Pediatric Residency program at Monmouth Medical Center in Long Branch, NJ. She completed a Pediatric Gastroenterology, Hepatology and Nutrition Fellowship at Children's Memorial Hospital in Chicago, IL.

Clinical interests: Celiac disease, transplant hepatology, and gastrointestinal problems associated with Cystic Fibrosis

Research interests: Gut immunology, autoimmune liver disease

Selected Recent Publications:

Teitelbaum J, Saeed S, Triantafyllopoulou M, Daum F. Infliximab in pediatric Crohn's disease patients with enterovesicular fistulas: a case series. *J Pediatr Gastroenterol Nutr* Feb 2007; 44(2):279-82.

Triantafyllopoulou M, Whittington PF, Melin-Aldana H, Benya EC, and Brickman W. Hepatic adenoma in an adolescent with elevated androgen levels. *J Pediatr Gastroenterol Nutr* May 2007;44(5):640-2.

Teitelbaum J and Triantafyllopoulou M. Fecal carriage of *S. bovis* in IBD. *Digest Dis Sci* Jul 2006;26 [Epub ahead of print].



Miguel Saps, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Director, Gastrointestinal Motility and Functional Bowel Disorders Program,
Children’s Memorial Hospital
Attending Physician, Children’s Memorial Hospital

Dr. Saps completed a Pediatric Gastroenterology and Hepatology Residency program at Hospital Ramon y Cajal, Hospital La Paz in Madrid, Spain. He completed a Clinical Research Fellowship in Pediatric Gastroenterology, Hepatology and Nutrition at California Pacific Medical Center in San Francisco, CA. He then pursued a Pediatric Residency at Maimonides Medical Center in Brooklyn, NY, and then a Pediatric Gastroenterology, Hepatology and Nutrition Fellowship at Children’s Hospital of Pittsburgh in Pittsburgh, PA.

Clinical interests: Functional bowel disorders and motility disorders

Research interests: Treatment pathogenesis and epidemiology of functional gastrointestinal disorders

Selected Recent Publications:

Barad A, Saps M. Factors Influencing Non-Organic/Functional Abdominal Pain in Children. *Curr Gastroenterol Rep* 2008;10(3).

Saps M, Blank C, Khan S, Seshadri R, Marshall B, Bass L, Di Lorenzo C. Seasonal Variation in the Presentation of Abdominal Pain. *J Pediatr Gastroenterol Nutr* 2008;46:279-84.

Saps M, Bolioli P, Espana M, Marshall B, Di Lorenzo C. Cost and Consultation Patterns of Abdominal Pain in Uruguayan Children. *J Pediatr Gastroenterol Nutr* 2008;46:159-63.

Saps M, Pensabene L, Staiano A, Wechsler J, Zheng XT, Di Lorenzo C. Postinfectious functional gastrointestinal disorders in children. *J Pediatr* 2008;152(6):812-6, 816 e1.

Saps M, Di Lorenzo C. Probiotics for abdominal pain disorders in children-safe to use but are they helpful? *Nat Clin Pract Gastroenterol Hepatol* 2007;4:430-1.

Saps M, Li BU. Chronic abdominal pain of functional origin in children. *Pediatr Ann* 2006;35:246, 249-56.



Ameesh Shah, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children’s Memorial Hospital

Dr. Shah completed a Pediatric Residency program at Children’s Hospital of Pittsburgh in Pittsburgh, PA. He completed a Pediatric Gastroenterology, Hepatology and Nutrition Fellowship at Children’s Memorial Hospital in Chicago, IL.

Clinical interests: Eosinophilic Esophagitis and allergic bowel disorders

Research interest: Eosinophilic Esophagitis

Selected Recent Publications:

Kagalwalla A, Shah A, Li UB, Ritz S. A Child with Milk-Protein Induced Eosinophilic Esophagitis and Gluten Sensitive Enteropathy. *J Pediatr Gastroenterol Nutr*, Mar 2007;44(3):386-388.

Shah A, Hirano I. Eosinophilic Esophagitis: Drugs, Diet or Dilation. *Current Gastroenterology Reports*. June 2007;9(3):181-188.



Jennifer Strople, MD

Assistant Professor, Northwestern University, Feinberg School of Medicine
Attending Physician, Children's Memorial Hospital

Dr. Strople completed both a Pediatric Residency program and a Pediatric Gastroenterology Fellowship at Cincinnati Children's Hospital Medical Center in Cincinnati, OH.

Clinical interest: Inflammatory Bowel Disease

Research interest: Outcomes in Inflammatory Bowel Disease



Peter F. Whittington, MD

The Sally Burnett Searle Professor of Pediatrics and Transplantation, Northwestern University, Feinberg School of Medicine
Director, Siragusa Transplantation Center, Children's Memorial Hospital
Director, Digestive Diseases and Immunobiology Research Center, Children's Memorial Research Center
Attending Physician, Children's Memorial Hospital

Dr. Whittington completed a Pediatric Residency and Chief Residency at the University of Tennessee Center for the Health Sciences in Memphis, TN. He completed a Gastroenterology Research Fellowship at The Johns Hopkins Hospital in Baltimore, MD, and Gastroenterology Research Fellowship in the Department of Pediatrics at the University of Wisconsin in Madison, WI.

Clinical interests: Childhood liver diseases, including neonatal hemochromatosis, genetic cholestasis, autoimmune hepatitis, sclerosing cholangitis, metabolic liver disease, biliary atresia, NAFLD/NASH (fatty liver disease), portal hypertension, transplant hepatology

Research interests: Mechanisms of cholestasis, non-alcoholic steatohepatitis, and neonatal hemochromatosis

Selected Recent Publications:

Strautnieks SS, Byrne JA, Pawlikowska L, Cebecauerová D, Rayner A, Dutton L, Meier Y, Antoniou A, Stieger B, Arnell H, Özçay F, Al-Hussaini HF, Bassas AF, Verkade HJ, Fischler B, Németh A, Kotalová R, Shneider BL, Cielecka-Kuszyk J, McClean P, Whittington PF, Sokal E, Jirsa M, Wali S, Jankowska I, Pawłowska J, Mieli-Vergani G, Knisely AS, Bull LN, Thompson RJ. Severe bile salt export pump deficiency: 82 different ABCB11 mutations in 109 families. *Gastroenterology* 2008;134:1203-13.

Whittington PF, Kelly S. Outcome of pregnancies at risk for neonatal hemochromatosis is improved by treatment with high dose intravenous immunoglobulin. *Pediatrics* 2008;121(6):e1615-21.

Derusso PA, Ye W, Shepherd R, Haber BA, Shneider BL, Whittington PF, Schwarz KB, Bezerra JA, Rosenthal P, Karpen S, Squires RH, Magee JC, Robuck PR, Sokol RJ. Growth failure and outcomes in infants with biliary atresia: A report from the Biliary Atresia Research Consortium. *Hepatology* 2007;46:1632-8.

Kohli R, Pan X, Malladi P, Wainwright MS, Whittington PF. Mitochondrial reactive oxygen species signal hepatocyte steatosis by regulating the phosphoinositol-3 kinase cell survival pathway. *J Biol Chem* 2007;282:21327-36.

Lin C-C, Sundaram SS, Hart J, Whittington PF. Sub-acute non-suppurative cholangitis (Cholangitis Lenta) in pediatric liver transplant patients. *J Pediatr Gastroenterol Nutr* 2007;45:228-33.

Knisely AS, Strautnieks SS, Meier Y, Stieger B, Byrne JA, Portmann BC, Bull LN, Pawlikowska L, Bilezikçi B, Özçay F, László A, Tiszlavicz L, Moore L, Raftos J, Arnell H, Fischler B, Németh A, Papadogiannakis N, Cielecka-Kuszyk J, Jankowska I, Pawłowska J, Melin-Aldana H, Emerick KM, Whittington PF, Mieli-Vergani G, Thompson RJ. Hepatocellular carcinoma in ten children under five years old with bile salt export pump deficiency. *Hepatology* 2006;44:478-486.

Sahai A, Pan X, Paul R, Malladi P, Kohli R, Whittington PF. Roles of phosphatidylinositol 3-kinase and osteopontin in steatosis and aminotransferase release by hepatocytes treated with methionine-choline deficient medium. *Am J Physiol Gastrointest Liver Physiol* 2006;291:G55-62.

Shneider BL, Brown MB, Haber B, Sokol RJ, Whittington PF, Schwarz K, Squires R, Bezerra J, Shepherd R, Rosenthal P, Hoofnagel JH for the Biliary Atresia Research Consortium. A Multi-center Study of the Outcome of Biliary Atresia in the United States (1997-2000). *J Pediatr* 2006;148:467-74.

Division of Gastroenterology, Hepatology and Nutrition Current Fellows

First Year Fellows:



Saeed Mohammad, MD

Dr. Mohammad graduated from The Aga Khan University Medical College in Karachi, Pakistan, and completed his Pediatric Residency at Vanderbilt Children's Hospital in Nashville, TN.



Joshua Prozialeck, MD

Dr. Prozialeck graduated from The Ohio State University College of Medicine in Columbus, OH, and completed his Pediatric Residency training at Children's Memorial Hospital in Chicago, IL.



Second Year Fellows:



Silvana Bonilla, MD

Dr. Bonilla completed her Pediatric Residency training at Miami Children's Hospital, Miami, FL. She is currently working on a translational research project entitled "Renal developmental anomalies in patients with Neonatal Hemochromatosis (NH)".



Ashish Chogle, MD, MPH

Dr. Chogle completed his Pediatric Residency training at SUNY Downstate Medical Center in Brooklyn, NY. He is currently working on a basic science research project entitled "The Role of MFG/E8 in Inflammatory Bowel Disease".



Third Year Fellow:



Ashis Barad, MD

Dr. Barad completed his Pediatric Residency training at Children's Hospital of Austin in Austin, TX. He is currently working on a clinical research project entitled "Incidence of Nonanastomotic biliary strictures in patients with Hepatic Artery Stenosis – A Single Center Experience".

Division of Gastroenterology, Hepatology and Nutrition Clinical Nursing and Nutrition Staff

Advanced Practice Nurses

Patricia Barbaro, RN, MSN, APN/NP

Specialty: General Gastroenterology,
Inflammatory Bowel Disease

Ilana Lee Cymerman, RN, MSN, CPNP

Specialty: Liver Transplant

Joan Lokar, RN, APN/NP, CCTN

Specialty: Liver Transplant

Maria Manuel-Rubio, RN, MSN, APN

Specialty: General Gastroenterology,
Inflammatory Bowel Disease, Eosinophilic
Esophagitis

Jessica Zimont, RN, MSN, FNP

Specialty: Intestinal Rehabilitation and Transplant

Registered Nurses

Dolores Cupuro, RN, BSN

Specialty: General Gastroenterology,
Gastrointestinal Motility Disorders

Therese Hess, RN, BSN

Specialty: Hepatology, Clinical Research

Susan M. Kelly, RN, BSN

Specialty: Hepatology Clinical Research

Lisa Keys, RN, BSN

Specialty: Intestinal Rehabilitation and Transplant

Alma Moya, RN, BSN, MEd, CPN

Specialty: Endoscopy

Cindy Riazzi, RN, BSN, CPN

Specialty: Hepatology

Annie X. Roewe, RN, BSN

Specialty: Gastroenterology

Emily Whalen, RN, BSN

Specialty: Gastroenterology

Clinical Nutritionists

Kimberly Kazmerski, MSRD, CSP, CNSD

Specialty: Intestinal Rehabilitation and Transplant, Liver Transplant

Sally Ritz, RD, CSP, LDN

Specialty: General Gastroenterology, Eosinophilic Esophagitis,
Celiac Disease, Hepatology

Carmyn Zoller, RD, LDN

Specialty: Inflammatory Bowel Disease

Research

After the first year, fellows devote about 80 percent of their effort towards research. Each fellow can choose a course of either basic or clinical research and opportunities are not limited to the resources of the Division. While there are adequate resources for research and mentorship within the Division, fellows may pursue their research education in laboratories at Northwestern. The Division of Gastroenterology, Hepatology and Nutrition currently has more than 60 active research projects, 26 of which have received peer review funding, and have had more than 50 peer reviewed journal articles published between January 2006 and present.

Children's Memorial Research Center

Basic science research on the Children's Memorial Hospital campus occurs in the Children's Memorial Research Center (CMRC). It is the only institution dedicated to pediatric research in Illinois and one of only a handful in the nation. CMRC's mission is to generate new knowledge leading to advancements in the prevention, diagnosis, and treatment of diseases that affect the development of children through adolescence as well as adult disorders that derive from them.

In 2007, the center was awarded \$28.5 million in external grants and contracts, 60 percent of which came from the federal government, including the National Institutes of Health (NIH). CMRC is one of 13 multidisciplinary centers of Northwestern University's Feinberg School of Medicine, where principal investigators who are part of CMRC are full time faculty members.

The laboratory facilities at CMRC are fully equipped with standard biochemical, molecular biological, and tissue culture facilities. An accredited animal facility for both conventional and genetically engineered animals is on site.

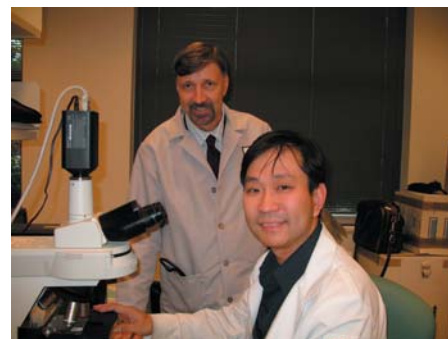


Gastroenterology and Hepatology Laboratory Staff

Dr. Wershil's Lab

Research Scientist: Ming Wang, MD

Dr. Wershil's research interests include the role of mast cells in GI inflammation and homeostasis. This work involves the use of mouse models to investigate mast cells and mast cell mediators in a variety of inflammatory reactions, including allergic, neurogenic, and immune inflammation. The lab is also interested in the pathogenesis of eosinophilic esophagitis, and specifically the mediators that influence the pathology of the esophagus.



Barry Wershil, MD and Ming Wang, MD

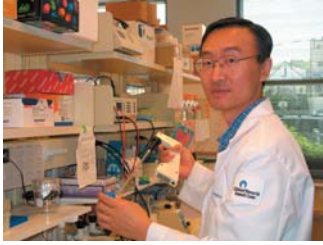


Peter Whittington, MD and Padmini Malladi

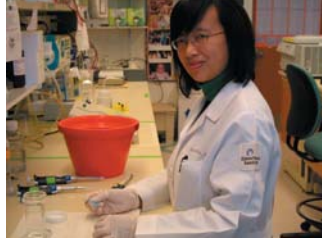
Dr. Whittington's Lab

Lab Manager: Padmini Malladi, MS
Research Associates: Navdha Mittal, PhD
Xiaomin Pan, MD
Songtao Yu, PhD

Dr. Whittington and his lab are involved in translational research utilizing animal and cell-based models and molecular approaches to understand the immune mechanisms involved in the pathogenesis of neonatal hemochromatosis and biliary atresia. He is also interested in hepatocyte "survival" cell signaling involved in nutrient sensing and fatty liver disease and in the protective response to cholestasis.



Songtao Yu, PhD



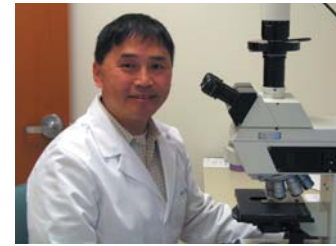
Xiaomin Pan, MD



Navdha Mittal, PhD

Digestive Diseases and Immunobiology Research Center

Director: Peter F. Whittington, MD
Co-Director, Basic Science: Xiao-Di Tan, MD
Manager: Padmini Malladi, MS



Xiao-Di Tan, MD

The Digestive Diseases and Immunobiology Research Center was created in 2006 with a mission to promote through basic and translational research a better understanding of the pathogenic mechanisms and therapies of diseases of the digestive system, in particular the immune mechanisms of inflammatory diseases, transplantation and tolerance. The center is interest-driven, consisting of a small group of dedicated, enthusiastic, and productive researchers, all of whom study the mechanisms of diseases involving the liver and intestines. They have common interests in immunology, cell signaling, and cell death as they relate to digestive diseases.

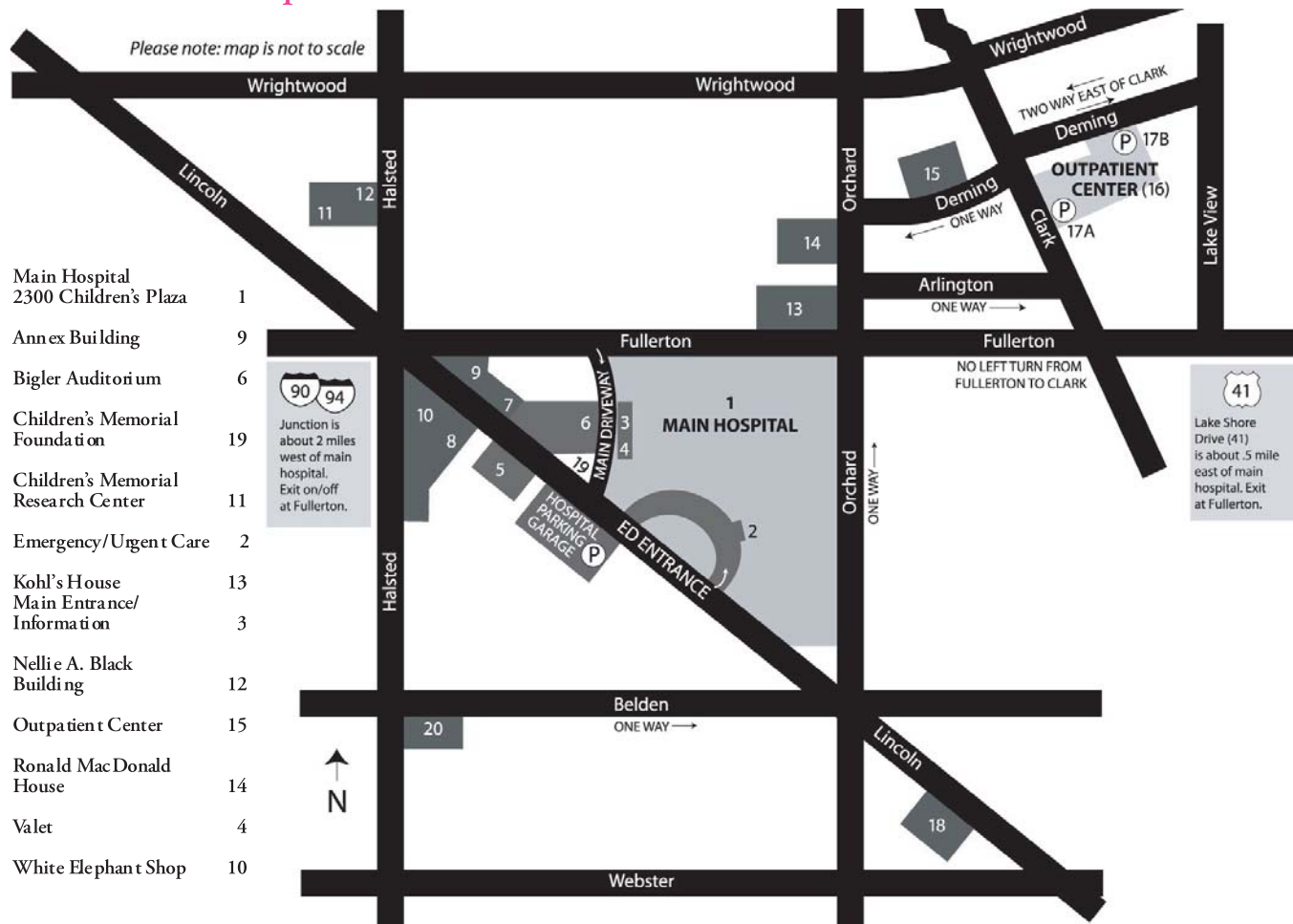
Dr. Whittington's lab focuses on the pathophysiology of liver diseases of children, specifically biliary atresia, genetic cholestasis, obesity associated fatty liver disease, and neonatal hemochromatosis. Dr. Tan's lab focuses on mucosal immunity and intestinal mucosal barrier function. They have demonstrated that probiotics (i.e. protective or friendly bacteria) induce anti-microbial capacity of important host immune cells macrophages and modulate the phenotypes of mucosal dendritic cells inducing protection against sepsis. Dr. DePlaen's lab focuses on the pathophysiology of necrotizing enterocolitis and in particular the role of NF- κ B in its pathogenesis.

About Children's Memorial Hospital

Children's Memorial Hospital's mission is dedicated to the health and well-being of children. We have a 125-year history of providing compassionate care in a family-centered environment, staffing top pediatric specialists, using the latest technologies, and offering valuable kid-focused experience. Children's Memorial is Illinois' only freestanding children's hospital. We have 270 licensed beds, including 42 beds in the NICU and 42 in the PICU. We consistently rank as one of the nation's best children's hospitals by *U.S. News & World Report*.



Lincoln Park Campus



Building the Ann & Robert H. Lurie Children's Hospital of Chicago

Children's Memorial is building a new, state-of-the-art facility — the Ann & Robert H. Lurie Children's Hospital of Chicago — to provide highly specialized care for children. All 288 licensed inpatient beds will be in private rooms, including the neonatal intensive care unit. The hospital will be located in the Streeterville Community on the campus of Northwestern University's Feinberg School of Medicine. Moving to the campus of our academic partner will help us recruit top pediatric specialists and scientists, and leverage clinical, educational and research partnerships that will drive advances in pediatric health care, benefiting countless children. Construction began in May 2008, and the new hospital is scheduled to open in Spring 2012.

Applying to Our Pediatric Gastroenterology, Hepatology and Nutrition Fellowship Training Program

Application Process

Thank you for your interest in our Fellowship Program. We begin accepting applications September 1 and accept them through March 31. We interview applicants in February, March, and April. We have two fellowship positions available each academic year.

To apply, please submit the following:

1. Completed application form (located on the following two pages)
2. Photo (digital photo acceptable if submitting application electronically)
3. Curriculum Vitae
 - Where applicable, please include the following: education, post-graduate training, additional training, work experience, honors or awards, research experience, publications, and presentations
4. Personal Statement outlining your career goals in Pediatric Gastroenterology
5. Three letters of recommendation
 - One letter should be from the pediatric department chair, residency program director, or chief of staff from the hospital in which your residency training was done
 - If letters are being submitted electronically, they should be sent in PDF format, signed electronically, and sent directly from the author's email address
6. USMLE Scores for Steps 1, 2, and 3
7. Copy of Medical License (if applicable)
8. Medical School Transcripts (required for foreign medical graduates only)
9. ECFMG (required for foreign medical graduates)

Application materials may be mailed or emailed to the Fellowship Program Coordinator at:

Denise Jones
Fellowship Coordinator
Gastroenterology, Hepatology and Nutrition
Children's Memorial Hospital
2300 Children's Plaza, Box 57
Chicago, IL 60614
Phone: 773-880-4643
Email: drjones@childrensmemorial.org

POST-GRADUATE TRAINING			
Post-Graduate Training	Institution	Location	Dates
Internship			
Residency			
Additional Training			

SOCIETY MEMBERSHIPS	
Professional Society	Dates

APPLICATION CHECKLIST	
<p>Required with application form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Curriculum Vitae <input type="checkbox"/> Personal Statement <input type="checkbox"/> USLME (photocopy is acceptable) <input type="checkbox"/> Copy of Medical License (if applicable) 	<p>Foreign medical graduates also please include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Medical School Transcript <input type="checkbox"/> ECFMG Certificate

Please send complete application to:
 Denise Jones
 Fellowship Coordinator
 Gastroenterology, Hepatology and Nutrition
 Children's Memorial Hospital
 2300 Children's Plaza, Box 57
 Chicago, IL 60614