Charmaine Haikaeli Mziray-Andrew, MD

Education

2007- present	Fellowship, Pediatric Gastroenterology, Hepatology and Nutrition.
	University of Chicago Comer Children's Hospital, Chicago, IL
2003-2006	Pediatrics Residency
	Sinai Children's Hospital, Chicago, Il
1996	Doctor of Medicine (M.D)
	Instituto Superior de Ciencias Medicas-Havana. Havana, Cuba.

Internships and Training

2008	Human Subject Protection Training Program and clinical Trial training
	program, Biological science division, University of Chicago.
2000	Subject Protection Training Program and clinical Trial training
	program, Biological science division, University of Chicago.
1996-1997	Human Fellowship in Traditional Medicine, Acupuncture and Auricular
	therapy, Instituto Superior de Ciencias Medicas Havana. Havana, Cuba.
1996-1997	Fellowship in Tropical Medicine, Instituto de Medicina Tropical Pedro
	Kouri. Havana, Cuba.
1995-1996	Compulsory rotating internship. Instituto Superior de Ciencias Medicas
	Havana. Havana, Cuba.

Medical School Honors / Awards

Awards of Excellence in Biochemistry, Embryology (91), Anatomy, Histology (91-92), Pathology, Physiology (92), Surgery, Obstetrics and Gynecology (94), Ophthalmology, Psychiatry (95), Internal Medicine & Family Medicine (96)

Professional experience

2007- Present University of Chicago Comer Children's Hospital, Chicago, IL
Department of Pediatrics, Section of Gastroenterology, Hepatology and
Nutrition. Fellowship in Pediatric Gastroenterology, Hepatology and
Nutrition. Dr Ranjana Gokhale

Research Fellow: basic science research, Dr. E Claud

• Studying the effect of probiotic conditioned media on barrier function and intestinal integrity as it relates to necrotizing enterocolitis. We are specifically looking at the effect of a combination of probiotics, two of which, *L. Acidophilus* and *B. infantis*, have been studied in clinical trials in neonates and have been shown to reduce the incidence of NEC. Moreover, despite the effectiveness of probiotics in clinical studies the mechanism of protection has yet to be elucidated. In the premature population where there is an immature immune system the use of live bacteria may cause infection and sepsis. It is thought that the use of secreted bacterial products from the probiotics in the form of conditioned media rather than the live bacteria may decrease the risk of sepsis and still confer protection.

Clinical Research, Dr R. K. Azzam

• Retrospective chart review of clinical and histologic presentation, the management and outcomes of pediatric patients who underwent orthotopic liver transplantation

at the University of Chicago Children's Hospital and developed humoral rejection as a complication

Clinical Research, Dr R. K. Azzam and Dr J. Hart

Retrospective chart review of pediatric patients who underwent liver biopsy to
evaluate for conjugated hyperbilirubinemia and transaminitis at the University of
Chicago Children's Hospital and were diagnosed with giant cell hepatitis. We
evaluated the clinical presentation, the differential diagnosis of such patients at our
center including: clinical and histopathologic presentation, as well as the
management and outcomes.

Clinical Research, Dr A. Gasparitis and Dr B. Kirschner

 Retrospective chart review of pediatric and adolescent patients at the University of Chicago Children's Hospital who underwent enteroclysis as a radiographic modality to study the upper gastrointestinal tract and small bowel after receiving the conventional upper GI small bowel follow through for evaluation of small bowel disease.

2006-2007	Sinai Children's Hospital, Chicago, Il, Dept of Pediatrics
	Chief Resident, Pediatrics residency training program, Dr Michael Lotke
2003-2006	Sinai Children's Hospital, Chicago, Il, Dept of Pediatrics
	Pediatrics residency training program, Dr Michael Lotke

- Resident advisory committee.
- Volunteer for back to school, school physical and vaccination drive at local fire house

1998-2003 University of Chicago, Department of Gastroenterology, Hepatology and Nutrition

Research assistant/coordinator, Dr. S. Guandalini and Dr. Barbara S. Kirschner

- Work with Principal Investigator to write and implement research protocols.
- Conducted pilot research protocol on effect of Lactobacillus GG (L GG) on pediatrics Crohn's disease activity index (PCDAI) and intestinal permeability in pediatric subjects with IBD.
- Evaluated efficacy of L GG in a child with short gut syndrome and recurrent episodes of D-lactate acidosis secondary to small bowel bacterial overgrowth.
- Conducted electrophysiological studies on intestinal tissue of laboratory animals for the study of intestinal ion transport mechanism, using Ussing chambers.
- Managed University of Chicago Celiac Disease program research projects examining:
 - o the prevalence of celiac disease in at risk groups;
 - o the quality of life of people with celiac disease and their families.
- Coordinated and contributed data to the multi-center, multi-national study to evaluate sensitivity and specificity of a new tissue transglutaminase IgA assay.
- Utilized western blot, PCR, in the study of heat shock proteins in treated and untreated, Caco2 and t84 cell lines
- Coordinated pediatric clinical trials on humanized anti-TNFα, CDP 571, and managed case report forms (CRF) entries, coordinated clinic visits, follow-up laboratory and physical assessments.

• Contributed data to multi-center, national consortium registry of pediatric and adolescent patients with inflammatory bowel disease by conducting chart reviews abstraction of data.

10/2000 –6/2003 University of Chicago, Dept. of Linguistics. **Swahili Lecturer**

- Taught elementary and intermediate Swahili.
- Conducted summer preparatory course for Swahili

Publications.

- 1. Gupta P, **Andrew H,** Guandalini S, Kirschner B. "Is Lactobacillus GG helpful in children with Crohn's Disease? Results of a preliminary, open-label study". *J Pediatr Gastroenterol Nutr* 31:453-457, 2000
- 2. Elisabetta Fabiani, Carlo Catassi and the International working group on Eu-tTG. "The serum IgA class anti-tissue transglutaminase antibodies in the diagnosis abd follow up of Celiac disease. Results of an international multi-center study". *Eur J Gastroenterol and hepatol* 2001;31:659-665

Abstracts

- 1. Gupta P, **Andrew H**, Kirschner B. Usefulness of ASCA in children with indeterminate colitis. *J Pediatr Gastroenterol Nutr 1999*;28:55.
- 2. Guandalini S, Gupta P, **Andrew H,** Kirschner B. Lactobacillus GG improves intestinal barrier function in children with Crohn's disease. *J Pediatr Gastroenterol Nutr* 1999;28:556
- 3. Gupta P, Kirschner B, **Andrew H**, Guandalini S. Lactobacillus GG improves Pediatric Crohn's Disease Activity Index in Children with Crohn's Disease. *J Pediatr Gastroenterol Nutr* 1999;29:503
- 4. Gokhale R, **Andrew H**, Kirschner B. Safety and efficacy of long term Methotrexate (MTX) in pediatric patients with Inflammatory Bowel Disease (IBD). *J Pediatr Gastroenterol Nutr* 2000 31A64
- 5. **Andrew H,** Gupta P, Favus M, Guandalini S. Prevelence of tissue transglutaminase (TTG) antibodies in patients with osteoporosis in the United States. *J Pediatr Gastroenterol Nutr* 2000 31A65
- 6. Gupta P, **Andrew H**, Kirschner B, Gastroenterology, Usefulness of pANCA and ASCA in children with indeterminate colitis. *J Pediatr Gastroenterol Nutr* 04/2002, *Volume:* 122, Pages A-11
- Barbara S. Kirschner, Melvin B. Heyman, Traci E. Clemons, George D. Ferry, Robert N. Baldassano, Harland S. Winter, Stanley A. Cohen, Benjamin D. Gold and members of the Pediatric IBD Consortium. Department of Pediatrics, The University of Chicago Comer, Gastroenterology, The Pediatric IBD Consortium Database: Initial Demographic Findings, *J Pediatr Gastroenterol Nutr* 04/2002, Volume: 122, Pages: A-611
- 8. Geraci C, Fain P, King C, Vrhovac V, York A, **Andrew H**, Cooper J, Simmonds A, Ferry G, Gold B, Winter H, Baldassano R, Kirschner B, Heyman M, Cohen S. Development and use of a pediatric inflammatory bowel disease (IBD) data collection instrument. *J Pediatr Gastroenterol Nutr* 2003; 37: 372-375
- 9. Gupta P, Gokhale R, **Andrew H,** Kirschner B. Thalidomide for refractory Crohn's disease failing infliximab. *J Pediatr Gastroenterol Nutr* 2003; 37:338-342
- 10. **C. H Mziray-Andrew**, E. Claud. Combined conditioned media of Lactobacillus acidophilus and Bifidobacterium infantis alters expression of tight junction proteins

improves barrier function in human intestinal epithelial cells. Pediatric research day June 9, 2009, 2009

11. **C. H Mziray-Andrew**, E Petrov, Y Sun, E Claud. Combined conditioned media of Lactobacillus acidophilus and Bifidobacterium infantis alters expression of tight junction proteins improves barrier function in human intestinal epithelial cells. NASPGHAN National Harbor, MD 12-14 November, 2009

Book Chapter

- 1. "La diagnostica di laboratorio in gastroenterologia pediatrica Gastroenterologia pediatrica pg 64-79 "The laboratory diagnosis in Pediatric gastroenterology"
- 2. Nutritional deficiencies in intestinal failure, Pediatric Clinics of North America [in press]

Volunteer Experience

First United Lutheran Church, Hammond, Indiana. Coordinator of
monthly Swahili service
Trinity Hospital, Chicago. Externship student. Responsible: Dr. N.
Olowopopo, Dr. L Kennedy and Dr. M. Scott
Instituto Superior Ciencias Medicas Havana, Cuba. Tutorial
Assistant. Tutored fellow medical students in courses of medical
English. Provided practical backup for presentation of medical cases
and discussion.
Maternity Hosp. America Arias, Dept. Obstetrics and Apprenticeship
student and Research assistant. Worked on various retrospective and
prospective studies together with mentoring team, including the
"scabies and moniliasis pandemic" in old Havana.
Tanzania Student Association in Cuba. Vice President.
Competitively elected vice president for the Tanzania Student
Association in Cuba.
Instituto Superior Ciencias Medicas Camaguey, Cuba. Tutorial
assistant. Tutored medical students in Biochemistry (90-91),
Anatomy (90-91), Physiology (92) and Clinical English (90-92)

Licensure/ certifications/membership

Election of certifications, members	111 10
Illinois Medical License	036116417
USMLE Step 1	10/1997
USMLE Step 2	03/1998
USMLE Step 3	10/2004
ECFMG permanent (0-587-922-6)	03/2002
PALS recertified	2007
ACLS recertified	2007
NRP certified	2007

Language Fluency (Other than English)

English, Spanish, Swahili, French, Portuguese, proficient in Italian

Other Awards / Accomplishments

1996-1997	Fellowship in Traditional Medicine, Acupuncture and Auricular therapy,
	Instituto Superior de Ciencias Medicas Havana. Havana, Cuba
1996	Fellowship in Tropical Medicine. Instituto de Medicina Tropical Pedro

Kouri, Havana, Cuba

<u>Hobbies & Interests</u>
Horse riding, athletics, soccer, gourmet cooking, baking, coaching children's soccer and interior decorating.