GOAL & SUMMARY

The purpose of the pediatric gastroenterology elective is for the BUSM student to conduct a diagnostic evaluation and initiate a treatment plan for children with gastrointestinal and liver diseases as well as gain exposure to special diagnostic procedures in gastroenterology, such as: endoscopic procedures, GI motility testing, and gastrostomy tube management/placement.

This elective will provide the medical student with an evidence-based approach to the evaluation and management of patients with common gastrointestinal problems that pediatricians may encounter in the practice of pediatrics. This may include: inflammatory bowel disease, celiac disease, constipation, chronic abdominal pain, diarrhea, vomiting, jaundice, and reflux/GERD. Students will learn to collect pertinent histories; differentiate normal and abnormal physical exams relevant to the gastrointestinal system; learn the differential diagnoses of many gastrointestinal complaints; gain deeper understanding of the types and interpretations of diagnostic studies, and learn treatment modalities for common gastrointestinal disorders. This elective is well suited for the BUSM student interested in general pediatrics and gastroenterology. It is expected at the conclusion of the elective that the student will have an appreciation of the acute and chronic management of children with gastrointestinal disorders.

OBJECTIVES

- Gather essential and accurate information about pediatric patients with common gastrointestinal disorders, including abdominal pain, constipation, chronic diarrhea, recurrent vomiting, hematochezia, hematemesis, failure to thrive, hepatitis, etc. (U)
- Construct a prioritized and age-specific differential diagnosis for informed management recommendations (e.g. diagnostic, therapeutic interventions) based on a patient's illness (U,S)
- Demonstrate an analytic and evidence-supported thinking approach to common pediatric GI clinical situations (U,R,E)
- Counsel and educate patients and their families about relevant disease processes, further evaluation, and therapy (B,C,A)
- Demonstrate both during rounds and through written documentation, an organized approach to clinical problem solving including a differential diagnosis and a systematic approach to the use of diagnostic testing (B,C,A,E,S)
- Explain the approach to long-term management of chronic illness and give examples of how this approach can prevent health problems and/or maintain health, and discuss the importance of compliance and follow-up (U,C,S)
- Locate and assimilate evidence from scientific studies related to their patient's health problems, including literature searches (U, R, E, S)
- Determine which educational resources are most useful for various purposes of clinical care and be able to appraise their strengths and weaknesses for: self-education, medical decision making, providing information to patients, and educating colleagues. (R, E)
- Work effectively as a team with other health care professionals including those from other disciplines to provide patient-focused care, develop and carry out

patient management plans. These include social work, nutritionists, residents, primary care providers, and GI nurses (B, C, S)

- Apply respect, compassion, and integrity; responsiveness to the needs of patients and their families; accountability to patients and their families and the profession; and a commitment to excellence and on-going professional development. (B, C, A, E)
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, and confidentiality of patient information. (B, C, A)
- Show sensitivity and responsiveness to patients' culture, age, gender, and disabilities. (B, A)

CURRICULUM

A. The curriculum includes:

I. Daily outpatient sessions in pediatric gastroenterology clinic

- Opportunity to independently see patients,
- Oral presentation of patients to faculty
- Written documentation under supervision
- As clinically indicated, gain skills with the interpretation of relevant radiologic imaging for these patients, which may include: fluoroscopy, ultrasound, plain films, CT scans, etc.

II. Procedure/Endoscopy Sessions

- Observe endoscopies, colonoscopies and anal manometry in the endoscopy suite
- Gain familiarity with anatomy and pathology as guided by the attending physician

III. Inpatient consults

- Daily bedside rounds and participation in patient evaluations
- Progress notes
- Patient presentations
- As clinically indicated gain skills with the interpretation of relevant radiologic imaging for these patients, which may include: fluoroscopy, ultrasound, plain films, CT scans, etc.

IV. Lectures & Conferences

- Daily lectures: Morning reports, chief resident noon conference with interns & residents
- Thursday morning Pediatric Grand Rounds @8am
- Friday morning Case of the Week Conference @ 8am
- Please note: there may be some variation in lecture schedule during the summer months. Please check with your attending to confirm.

B. The typical hours/schedule for this rotation are as follows:

Monday: 8 am -12 clinic, 12-1 morning report, 1-5 clinic Tuesday: 8-12 endoscopy, 12-1 morning report, 1-5 clinic Wednesday: 8-12 clinic Thursday: 8-9 grand rounds, 9-12 (every other week) endoscopy, 1-5 clinic Friday: 8-9 Case of the week, 9-1 clinic.

C. Day One

Please see contact information under "administrative contacts", part B. for information on how to schedule and start the rotation.

D. Assignments during this rotation, in addition to patient care tasks, will generally include assigned readings to be discussed and a twenty-minute oral presentation to the division on a topic to be decided upon with the course director at the end of the rotation.

By the end of the rotation, students will have either (1) seen and discussed a patient with or (2) read about the following the diagnoses:

- 1. Inflammatory Bowel Disease (ulcerative colitis & Crohn's disease)
- 2. GERD
- 3. Chronic constipation
- 4. Chronic vs acute Diarrhea including celiac disease
- 5. Abnormal liver function tests
- 6. Chronic abdominal pain
- 7. Failure to thrive
- 8. Gastrointestinal bleeding
- 9. Allergic gastroenteropathies

STUDENT EVALUATION

Students will be evaluated on the basis of their participation and performance in clinic, ward consultation, and rounds. In addition, students will be expected to complete any assigned reading and provide a brief (20 minute) presentation at the end of the rotation to demonstrate their ability to integrate evidence-based medicine into the care of children with GI illness. The final grade is submitted as honors, high pass, pass, or fail via the standardized clinical student evaluation forms generated by the BUSM registrar.

Process of Assessment: In the second week of the rotation, the student will meet with Dr. Morera for a mid-rotation evaluation. At the end of the rotation, the student will again meet with Dr. Morera to discuss the formal evaluation of his/her achievement of the above goals on a faculty observation checklist. This checklist will provide the basis for filling out and submitting the standardized BUSM IV student evaluation.