MEMORANDUM #145

TO: UNC Hospitals Attending Physicians, Housestaff, Nursing Coordinators, Department Heads and Supervisors

FROM: Melissa B. Miller, PhD, Director, Molecular Microbiology Laboratory
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DATE: June 20, 2013

SUBJECT: Laboratory Diagnosis of Gastrointestinal Pathogens - CHANGES IN TESTING

Effective July 7, 2013, the Molecular Microbiology Laboratory will begin offering a molecular test that will detect multiple gastrointestinal pathogens from the same stool sample (Luminex xTAG Gastrointestinal Pathogen Panel, GPP). Details on this assay can be found online at http://www.luminexcorp.com/Products/Assays/ClinicalDiagnostics/xTAGGPP. **The Gastrointestinal Pathogen Panel can be ordered in CPOE/SMS as the GI Pathogen Panel-SMS/CPOE order # 9225.** The GPP assay is FDA-cleared and will detect *Campylobacter*, *E. coli* O157, enterotoxigenic *E. coli* (ETEC), shiga-toxin producing *E. coli* (STEC), *Salmonella*, *Shigella*, *Giardia*, *Cryptosporidium*, rotavirus, and norovirus. **Molecular detection of gastrointestinal pathogens is replacing traditional methods of detection. The following tests will no longer be available:** fecal screening cultures (*Campylobacter*, *Salmonella*, *Shigella*, *Vibrio*, *Yersinia*), parasite screens (*Giardia* and *Cryptosporidium*), and rotavirus antigen detection. *Clostridum difficile* testing and adenovirus stool PCR will continue to be offered separately. Comprehensive ova and protozoa (O&P) exam will continue to be offered for patients with a travel history for which parasites other than *Giardia* and *Cryptosporidium* are possible; this test has been renamed to O&P Microscopy.

Stool is the only acceptable specimen type which should be transported to the Microbiology laboratory as soon as possible, but no later than 2 hours post-collection. For locations unable to send specimens within 2 hours, please put the stool in Cary-Blair transport medium (orange stool vial). Stool specimens must not be collected after administration of barium, bismuth or oil. Rectal swabs, vomitus, and other stool transport devices will be rejected. The test will not be performed on inpatients that have been in-house for > 3days without director authorization. Due to the increased sensitivity of the GPP assay over traditional methods, **one specimen per patient is adequate**. Testing of more than one specimen per patient requires director approval. The assay will be performed daily Monday through Friday with a turnaround time of 1-3 days.

Our in-house validation studies showed a 65% increase in the detection of gastrointestinal pathogens by the GPP over traditional methods. Further, much of the increase was due to identifying pathogens for which the physician did not order a test.

Additional information can be found on the McLendon Clinical Laboratories website (http://labs.unchealthcare.org/). Questions not answered by the website can be directed to the Molecular Microbiology Laboratory at 966-6101 or Dr. Melissa Miller at 966-3723.