

FLETCHER ALLEN HEALTH CARE

PATHOLOGY & LABORATORY MEDICINE

LABORATORY COMMUNIQUÉ JANUARY 2011

Patient Service Center Holiday Hours

Christmas Weekend

Friday, December 24:	UHC	9:00 a.m. – 1:00 p.m.
	Fanny Allen Campus	9:00 a.m. – 1:00 p.m.
	ACC	9:00 a.m. – 1:00 p.m.
Saturday, December 25:	CLOSED	

New Year Weekend

Friday, December 31:	UHC	7:00 a.m. – 5:00 p.m.
	Fanny Allen Campus	7:00 a.m. – 5:00 p.m.
	ACC	7:00 a.m. – 5:00 p.m.
Saturday, January 1, 2011:	CLOSED	

Regularly scheduled hours will apply to any days not specifically addressed above.

To view our regularly scheduled Patient Service Center hours, please go to <http://www.fletcherallen.org/drawsites> or call Laboratory Customer Service for assistance 847-5121 or 1-800-991-2799.

UHC Patient Service Center

Our newest public sample collection site, located in the University Health Center (UHC) at 1 South Prospect Street in Burlington opened on October 18, 2010. This new site has been very well received by patients. This newly renovated and expanded area offers 4 chairs, pediatric phlebotomy, a private draw room and a child-friendly waiting area in addition to adult specimen collection. This site is open Monday through Friday from 7:00 a.m. to 7:00 p.m.

We hope that you will encourage your patients to utilize the UHC Campus as their primary specimen collection site. Starting in early 2011, the Ambulatory Care Center (ACC) collection site will be available only to patients with an appointment at the ACC on the same day.

Collections will still be available at our Fanny Allen Campus, Monday – Friday, 7:00 a.m. – 7:00 p.m., and Saturday 9:00 a.m. – 1:00 p.m.

Patients requiring a STAT or timed draw on off hours should still be instructed to present at the level 3 (street level) main registration area in the ACC; a phlebotomist will be paged.

Laboratory Operations

PSC Winter Holiday Hours
UHC Patient Service Center
New Lab Outreach Specialist
PrismLink Keeps an Eye on your Patients

Tech Tip

Blood Sample Processing Affects Results

Test News

Alpha-1 Antitrypsin Change in Reportable Range
Light Pink Blood Bank Tubes Replace Yellow Cytomegalovirus (CMV) IgG Change
Estradiol Assay Change
RBC Folate Testing Now Obsolete
Helicobacter pylori Antibody IgG Change
PAP and HPV Reports
PTH Assay Change
Rubella Antibodies IgG Change
Sex Hormone Binding Globulin and Calculated Free Testosterone Change
Toxoplasma Antibody IgG Discontinued

Compliance Update

Physician Signature on Laboratory Requisitions

LABORATORY OPERATIONS

New Lab Outreach Specialist

Please join us in welcoming Melissa Johnson to our Lab Outreach Team. Melissa's previous experience includes working in the operating room at FAHC and in Lab Customer Service. We are thrilled to add her to our group of dedicated outreach professionals. You can contact Melissa via telephone at 847-9479 or email her at Melissa.Johnson@vtmednet.org.

PrismLink Keeps an Eye on Your Patients

Fletcher Allen Health Care is pleased to offer your practice PrismLink, a software tool that provides real-time Web access to patient information at Fletcher Allen. Using PrismLink, your staff can access your patients' clinical data and communicate with Fletcher Allen to provide quality patient care. You can also use PrismLink to quickly refer patients to our organization, and you can monitor events that occur in your patients' care, such as inpatient admissions or discharges, completion of outpatient visits, or new lab results.

In order to connect to PrismLink, you must use one of the following Internet browsers:

- Microsoft Internet Explorer 6.0 through 7.0 (for Microsoft Windows platforms)
- Mozilla Firefox 2.0 and 3.0 (for Microsoft Windows platforms; 2.0 only for Mac OS X platforms)

You can use a dial-up Internet connection to access PrismLink, but for optimal speed and performance we recommend that you use a high-speed Internet connection. In addition, your browser needs to be Java-enabled to display graphs and scanned images.

If you would like more information about PrismLink, please contact **Billie Dearmin**; her direct phone number is 847-9554, and her email address is Billie.Dearmin@vtmednet.org

TECH TIP

Blood Sample Processing Affects Results

Most routine laboratory tests are performed on a liquid fraction of blood: either plasma or serum. Plasma tubes (blue, green, lavender, and yellow top tubes) contain an anticoagulant that prevents the blood sample from clotting. It is important not to overfill or underfill plasma tubes during collection in order to ensure the proper ratio of blood to anticoagulant. All tubes (for plasma or serum) should be gently inverted 5 times after collection: in plasma tubes, this mixes the blood with the anticoagulant, and in serum tubes, this ensures that clot activation is initiated.

Serum tubes (either SST or red tops) should then remain upright at room temperature for 30 minutes after sample collection and before centrifugation. If the sample is spun before it has clotted completely, a dense fibrin mass may form, making it difficult to separate the serum from the cells, and this increases the chances of the sample becoming hemolyzed during separation. Samples waiting to be centrifuged should not sit at room temperature for longer than 60 minutes. Prolonged exposure of serum/plasma to the cells can alter some test results.

Blood tubes should be spun in the centrifuge for 10 to 15 minutes. For a serum gel tube (SST), good separation means the gel barrier is firmly wedged against the sides of the tube to form a barrier between the cells and the serum. If there is incomplete separation, the gel will have a mottled appearance and the sample should be respun.

If a centrifuge is not available, and you have collected a blood sample, it is best to put the tube in the refrigerator or cooler until transportation to the laboratory can be arranged.

If you have questions or would like assistance with anything concerning sample collection, processing, storage or transport, please call Laboratory Client Relations at 847-5121; we will be happy to help.

TEST NEWS

Alpha-1 Antitrypsin Change in Reportable Range

Effective November 17, 2010, the reportable range for alpha-1 antitrypsin changed from 10-3600 mg/dL to 10-600 mg/dL. Patient results greater than 600 mg/dl are now reported as greater than 600 mg/dl. If you have any questions concerning this change, please contact Dr. Greg Sharp (Gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

Light Pink Blood Bank Tubes Replace Yellow

The Blood Bank is changing the preferred specimen tube from the yellow ACD tube to the 10 mL **LIGHT PINK EDTA** tube. This change will help eliminate the problem of specimens being rejected due to under-filled tubes. Please be sure to gently invert the tubes after filling to ensure the anticoagulant is mixed with the blood. We will continue to use the yellow top ACD tubes until the supply in the warehouse is used up. We anticipate that we will start to see the light pink EDTA tubes by the end of November 2010.

Cytomegalovirus (CMV) IgG Change

As of January 5, 2011, the assay used for the CMV Antibody IgG will be changed from the Siemens Immulite® 2500 (Siemens Healthcare Diagnostics) to the Inova (Inova Diagnostics). The assay will also be performed in the Immunology Laboratory rather than the Chemistry Laboratory. If you have any questions concerning this change, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

Estradiol Assay Change

The manufacturer of the reagent used by the Chemistry Laboratory for the estradiol assay, Siemens Healthcare Diagnostics, has announced a new standardization for this assay. This new reagent for the ADVIA Centaur® system will be put into use on January 10, 2011. The new Enhanced Estradiol assay will provide an extended dynamic range, improved precision, improved low end sensitivity and standardization traceable to Isotope Dilution Gas Chromatography-Mass Spectrometry. Comparison between the two assays has shown that the new assay gives somewhat higher values at the low end of the analytical range, with lower values at results greater than 200 pg/mL. There is some variability in this between patients, however. The new normal range for the assay is:

	Units pg/mL
Males	Less than 12 – 40
Menstruating Females (by day in cycle relative to LH peak)	
Follicular phase (-12 to -4 days)	20-144
Mid-cycle (-3 to +2 days)	64-357
Luteal phase (+4 to +12 days)	56-214

If you have any questions or concerns about this change, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

TEST NEWS

RBC Folate Testing Now Obsolete

Although historically the red blood cell folate assay was recommended as a better indicator of folate stores when compared to the serum folate assay, as the former was thought to be less affected by the recent ingestion of food, experience at Mayo Medical Laboratories indicates that this is not the case. The complexity of the assay and problems with the imprecision and inaccuracy of the assay have led them to classify this test as obsolete. As of October 1, 2010, any requests to the FAHC Laboratory for this assay are being converted to the serum folate test; if serum folate has been ordered concurrently, then the RBC folate test order is cancelled.

If there are any questions concerning this change, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

Heliobacter pylori Antibody IgG Change

As of January 5, 2011, the assay used for the *Heliobacter pylori* Antibody IgG will be changed from the Immulite® 2500 (Siemens Healthcare Diagnostics) to the Inova QUANTA Lite™ ELISA (Inova Diagnostics). The assay will also be performed in the Immunology Laboratory rather than the Chemistry Laboratory. Comparison samples between the two assays showed excellent agreement. If you have any questions concerning this change, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

Pap and HPV Reports

The Microbiology and Cytopathology Laboratory have collaborated to develop a single, unified report for results of concurrent Pap smear and HPV testing. The Pap smear result will be completed first, and when the Pap smear result is generated, you will receive a preliminary report containing the Pap result and a note that says "Human Papilloma Virus Testing has been initiated. Results will follow in a combined Pap and HPV report within 3-10 days." A sample report is attached to this communiqué.

PTH Assay Change

On December 15, 2010, the Chemistry Laboratory will change the instrument platform used for PTH assays. The new platform will be the ADVIA Centaur®, replacing the Immulite® 2500. Both are products of Siemens Healthcare Diagnostics.

Comparison of the two assays has shown excellent agreement, with the ADVIA Centaur® providing increased low end sensitivity. Intraoperative PTH assays will now be performed with the same reagents as those used for the routine assay. The reported reference range will change slightly from 10-69 pg/mL to 14-72 pg/mL.

If you have any questions concerning this assay, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

TEST NEWS

Rubella Antibody (IgG) Change

As December 15, 2010, the assay used for the Rubella Antibody (IgG) has been changed from the Siemens Immulite® 2500 (Siemens Healthcare Diagnostics) to the Vitros® 3600 (Ortho Clinical Diagnostics). Comparison of the two assays has shown excellent agreement. Results will be reported in the following format:

Test Result	Report	Interpretation
Less than 10 IU/mL	Negative	Presumed not immune to infection with Rubella
10 to 14.9 IU/mL	Low Positive	Presumed immune to infection with Rubella
Greater than or equal to 15 IU/mL	Positive	Presumed immune to infection with Rubella

If you have any questions concerning this change, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

Sex Hormone Binding Globulin and Calculated Free Testosterone Change

As of January 19, 2011, the Chemistry Laboratory will change the instrument platform used for the Sex Hormone Binding Globulin assay. The new platform will be the ADVIA Centaur®, replacing the Immulite® 2500. Both are products of Siemens Healthcare Diagnostics.

Comparison between the two assays has shown very good correlation. The results of this assay are also used in the calculation for free testosterone.¹ There will be small changes in the reference ranges for these assays. If you have any questions concerning these changes, please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

¹Vermeulen A, Verdonck L, Kaufman JM. A critical evaluation of simple methods for the estimation of free testosterone in serum. *J Clin Endocrinol Metab* 1999;84:3666-72.

Toxoplasma Antibody (IgG) Discontinued

As of December 28, 2010, the Chemistry Laboratory will discontinue performing the Toxoplasma IgG antibody assay. Tests ordered subsequently will be sent to Mayo Medical Laboratories. Results of these assays are comparable. If you have any questions concerning this change please contact Dr. Greg Sharp (gregory.sharp@vtmednet.org) in the Chemistry Laboratory.

To view the most up to date test information, go to our online test catalog at <http://www.fletcherallen.org/testcatalog>
Enter the test name or test code into the appropriate box and press "SEARCH".
For MML tests, press on the Mayo Test Number link for more test information.

COMPLIANCE UPDATE

Final rule: Physician Signature on Laboratory Requisitions

The Centers for Medicare and Medicaid Services (CMS) recently published a final rule with regard to physician signature on a laboratory requisitions. Under the new policy, the signatures of physicians and non-physician practitioners (NPP) are required on paper requisition forms for laboratory testing. Physicians or NPPs can continue to request tests by other means, such as documented telephone or electronic requests. This new policy goes into effect January 1, 2011.

If you have any questions concerning the new policy you can contact laboratory Compliance through Customer Service at 847-5121



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Pathology & Laboratory Medicine
Ambulatory Care Center EP1-100
Mail Stop 233 MP-1
Burlington VT 05401

Phone: (802)847-5121 or
(800)991-2799
<http://www.fahc.org/pathology>



CYTOPATHOLOGY REPORT

Name: **SUNQUEST, TEST9**
DOB: 9/9/2008 (Age: 1) F

Accession #: **T10-64**
MRN #: 0043185107

Location: B005
Provider: LURIA MD, SCOTT
Copy to:

Collect Date: 8/13/2010
Receive Date: 8/13/2010

Specimen/Source: Pap Test, Cervix/Endocervix, ThinPrep Imaging System with manual evaluation

Last Menstrual Period:

SPECIMEN ADEQUACY

Satisfactory for Evaluation
- transformation zone component present

GENERAL CATEGORIZATION

Negative for Intraepithelial Lesion or Malignancy

Document reviewed and electronically signed by:
Timothy L. St. John, CT(ASCP)
Report Date: 8/13/2010 07:49

Status: Ordered

Human Papilloma Virus Testing has been initiated. Results will follow in a combined Pap and HPV report within 3-10 days.

*** Preliminary ***

Report Date:

Human Papilloma Virus testing performed at Fletcher Allen Health Care Microbiology Department, and results transmitted via electronic interface.

End of Report



CYTOPATHOLOGY REPORT

Name: **SUNQUEST, TEST9**
DOB: 9/9/2008 (Age: 1) F

Accession #: **T10-58**
MRN #: 0043185107

Location: B005
Provider: LURIA MD, SCOTT
Copy to:

Collect Date: 8/6/2010
Receive Date: 8/6/2010

Specimen/Source: Pap Test, Cervix/Endocervix, ThinPrep Imaging System with manual evaluation

Last Menstrual Period:

SPECIMEN ADEQUACY

Satisfactory for Evaluation
- transformation zone component present

GENERAL CATEGORIZATION

Negative for Intraepithelial Lesion or Malignancy

Document reviewed and electronically signed by:
Timothy L. St. John, CT(ASCP)
Report Date: 8/6/2010 15:15

Status: Signed Out

HUMAN PAPILLOMA VIRUS DNA DETECTION:

: Negative for HPV types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59,
and 68.

Report Date: 8/11/2010

Human Papilloma Virus testing performed at Fletcher Allen Health Care Microbiology Department, and results transmitted via electronic interface.

End of Report