



Celebrating 10 years

# LABlines

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News from LABORATORY ALLIANCE of Central New York, LLC

[www.laboratoryalliance.com](http://www.laboratoryalliance.com)



## Vitamin D - It's Important for More than Healthy Bones!

By Michael R. O'Leary, M.D., CEO

It's long been known that vitamin D is vital for strong bones. Since the 1930's, most milk has been fortified with "D" to prevent rickets, a bone-softening disease.

New research however suggests that it also protects against a wide variety of diseases including cancer, diabetes and heart attacks. You may be surprised to know that "vitamin D" is actually not a vitamin but rather a fat-soluble hormone that helps the body maintain sufficient levels of calcium and phosphorus.

Ultraviolet B (UVB) rays from the sun convert a cholesterol-like molecule into vitamin D in the skin. A number of factors influence the continuous synthesis of vitamin D including geographic location, season of the year, age, skin pigmentation and use of sun screen. Individuals living in locations north of 42° north latitude (e.g. Boston, Central New York etc.) produce little or no vitamin D during winter months. Vitamin D reserves are liberated from fat stores, if present, during these months.

Unfortunately as individuals age and less vitamin D is synthesized by the skin, the body becomes less efficient at properly

using reserves as well. This often leads to a failure in maintaining calcium homeostasis, resulting in a depletion of bone mass and an increased risk of fractures. High potency supplements are often prescribed for rapid resolution of vitamin D deficiency in such patients. Unfortunately, many tests do not measure the **supplemental** form of vitamin D. It is imperative therefore to request a **total** vitamin D test (25-OH vitamin D) in order to assess a patient's true status. Laboratory Alliance is one of the few laboratories regionally to offer this **total** vitamin D test.

The weight of evidence connecting low vitamin D levels with poor health other than bone disease is getting heavier! Recent studies have linked low levels of vitamin D with increased risk of myocardial infarction (heart attacks) in men as well as an increased risk of death from any disease, including cancer.

Not surprisingly, more physicians are ordering vitamin D levels on their patients and recommending supplements in those with low levels. The importance of using an assay that measures **total** vitamin D level cannot be over-emphasized. Please visit our website for additional information on vitamin D and our updated test bulletin.



*Dozens of employees and their families and friends participated with the Laboratory Alliance team in the 2008 JPMorgan Chase Corporate Challenge 3.5-mile road race. The race was held June 24 at Onondaga Lake Park.*

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## Implementation of a Quality Management System

By Jane Riffanacht, Document Control Supervisor

Laboratory Alliance is pleased to announce the implementation of a web-based quality management system specifically built for health-care organizations.

The software, known as Lab QMS by SoftTech Health, is designed to help organizations such as ours comprehensively and efficiently meet document management needs by putting policies, procedures and other documents online. As a multi-facility operation, this new software technology offers significant enhancements that will benefit all employees company-wide. A few of the features and benefits include:

- Consolidation of multiple sources and formats of data into one system;
- Access to all standard operating procedures by staff network-wide;
- Productivity gains and reduction in manual processes;
- Built-in and custom internal controls for new and revised policies and procedures;

- Automated reminders for document revisions and review;
- Automated “read and sign” for training;
- Audit tracking and viewing functions enabling management to ensure compliance with The Joint Commission and other accreditation and document control requirements.

As the challenges of managing a healthcare organization continue to mount, Laboratory Alliance recognizes that quality information technology provides an essential role in optimizing performance, improving quality processes, reducing risks and enhancing regulatory and accreditation compliance.

The Lab QMS by SoftTech Health includes several application modules\*. In Phase I of the implementation, Laboratory Alliance is rolling out the standard operating procedures module. Managers and supervisors worked very hard to gather current policies and procedures for a one-time batch import in early May. This was followed by a two-day training camp for key users.

Currently, the Lab QMS project team is working to complete system set up and the document library in preparation for a Fall 2008 live date. We look forward to the wide-ranging improvements in information management that this software system is

able to provide to our company.

\*Future modules to be rolled out include:

- Task Manager
- Reference Lab Manager
- Forms Manager
- Equipment Manager
- Personnel Manager
- Accreditation/Audit Manager



*Phase 1 of the document control software training for the managerial staff was held May 8 at our Corporate Offices in our training classroom. The two instructors were Kirsten Cowan and Michael Francolla of SoftTech Health.*

## Change a Life Forever...Yours

From our friends Sr. Kathleen Osbelt and Beth Lynn Hoey, at Francis House



A Family When You Need It Most.

**“I always leave feeling better than when I arrived.”**

**“You receive so much more than you give.”**

**“The love is palpable.”**

These are the words we hear over and over again from our volunteers at Francis House.

Our mission is to provide a home and an extended family to people with terminal illnesses so they can die with dignity and experience the unconditional love of God.

This mission is carried out in two private homes on the North side of Syracuse. Volunteers are the heart of our home. They work one-on-one with residents; cook and serve meals; clean; garden; serve as greeters and so much more.

We invite you to be part of our Francis House family. Training is provided.

For more information, please call Rea Carver, volunteer coordinator, at 475-5422.

## We Welcome a New Client

**Tully Hill Alcohol and Drug Treatment Center**

Tully, N.Y.

**“Health is the thing that makes you feel that now is the best time of the year.”**

— Franklin P. Adams



## Fetal Fibronectin Testing: Assessing Risk of Preterm Labor and Delivery

By Jayne L. Healey, M.D., Assistant Director of Laboratories

Preterm delivery (< 37 weeks gestation) affects approximately 13 million births annually worldwide. The incidence is reported to be 5-11% of pregnancies, with 3-4% occurring before 34 weeks gestation. Associated neonatal mortality is high, especially in births occurring at earlier gestational ages. Surviving preterm infants frequently suffer significant long-term complications from respiratory distress syndrome and stroke. Prevention of preterm birth remains elusive, but effective management can improve neonatal outcome. Timely intervention is dependent on prediction of preterm delivery.

Fetal fibronectin (fFN) is a glycoprotein found in amniotic fluid and the placenta. It is normally undetectable in cervical and vaginal secretions after 20 weeks gestation. Prior to birth, fFN is released into the cervicovaginal fluid by mechanical or inflammatory mechanisms. The FDA has approved fFN testing of cervicovaginal fluid for assessing risk of preterm delivery in both symptomatic and asymptomatic patients.

In ectocervical and posterior vaginal swabs, fFN levels are normally undetectable from 22-35 weeks gestation. Fetal

fibronectin concentrations greater than 50 ng/mL during this time are useful in identifying women at risk for spontaneous preterm delivery. In asymptomatic women at less than 34 weeks gestation, the specificity of fFN testing is approximately 88% for predicting preterm delivery, with a negative predictive value of approximately 94%.

In women with symptoms of threatened preterm birth, negative fFN results identify women at very low risk for imminent delivery (<1% will deliver within the next 7-14 days). This information can be useful in limiting side effects and cost of unnecessary intervention. In symptomatic women, positive fFN results identify those at highest risk for spontaneous delivery within the next 7 to 14 days before advanced cervical dilatation.

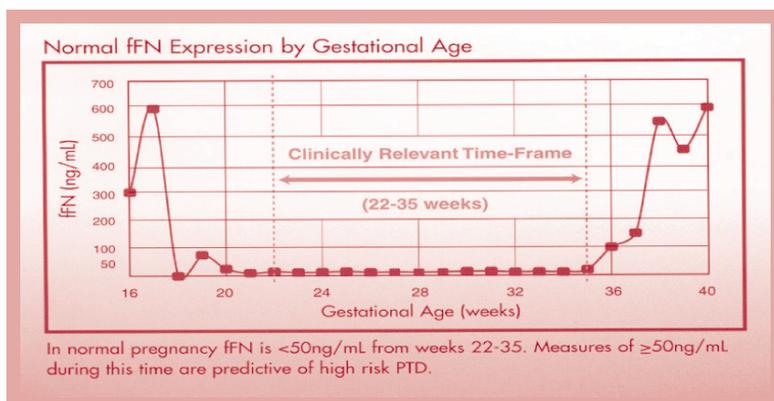
Laboratory Alliance performs rapid Fetal Fibronectin (fFN) testing by solid-phase immunochromatography. Testing is available 24 hours per

day, seven days per week. If requested STAT, results are available within two hours of receipt of the specimen within the laboratory.

fFN testing should not be performed in the following cases (risk of false-positives):

- Placenta previa, abruption or gross maternal blood contamination;
- Preeclampsia;
- Advanced cervical dilatation (> 3 cm) or ruptured membranes;
- Sexual intercourse in preceding 24 hours.

For more information regarding this test service, please contact Cheryl Haskins, Chemistry Manager, at 410-7014.



## Anti-Factor Xa Assay for Monitoring Low Molecular Weight Heparin

By Jayne L. Healey, M.D., Assistant Director of Laboratories

The FDA recently recalled large quantities of unfractionated heparin (UFH) after investigation linked numerous deaths to product contamination. This news release and associated UFH shortages have prompted many providers to substitute low molecular weight heparin (LMWH) preparations for patients requiring anticoagulation.

LMWH is approved by the FDA for the prevention and treatment of deep vein thrombosis (DVT) and treatment of unstable angina. The main advantages of LMWH over UFH are superior pharmacokinetics due to decreased binding with plasma and cellular proteins, longer

plasma half-life, better bioavailability, and more predictable dose response.

LMWH has decreased activity against thrombin, as compared to UFH, and thus has little effect on the activated Partial Thromboplastin time test (aPTT); therefore, LMWH is monitored with the anti-factor Xa assay. In general, monitoring of LMWH therapy is not indicated except in specific clinical circumstances. As LMWH is cleared primarily by the kidneys, patients with renal insufficiency may benefit from periodic monitoring. Monitoring of pediatric patients is recommended because infants and small children may require larger doses than adults, and studies have not

yet confirmed the safety and efficacy of LMWH in this population. Other patients that may require intermittent monitoring include morbidly obese adults (>190 Kg), patients with malignancy and pregnant women. Certain coagulopathies, such as factor XII deficiency, preclude monitoring of UFH by aPTT. In these cases, monitoring of UFH therapy may be possible using the anti-Xa assay.

Laboratory Alliance performs in-house anti-factor Xa monitoring of LMWH utilizing the preferred chromogenic anti-Xa assay. Ideal blood collection timing for peak anti-Xa activity is four hours after subcutaneous

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## Microbiology



### *Legionella* Outbreak and the *Legionella* Urine Antigen Test

By Paul A. Granato, Ph.D., Director of Microbiology

On July 7, Dr. Cynthia Morrow, Onondaga County Commissioner of Health, issued a Health Advisory titled "*Legionella* Outbreak in Onondaga County." This Health Advisory was the result of seven patients detected with laboratory-confirmed *Legionellosis* from June 28 to July 7. All cases were diagnosed by the *Legionella* Urine Antigen Test that was performed by the Laboratory Alliance Microbiology Department. At the time of preparation of this article (July 18), five additional patients were diagnosed as having *Legionella* pneumonia by also having positive *Legionella* Urine Antigen Tests.

Laboratory Alliance has been offering the *Legionella* Urine Antigen Test since January 2002. In brief, the *Legionella* Urine Antigen Test is an EIA-based assay that screens for the presence of *Legionella pneumophila* serogroup 1 antigen that is excreted in the urine of patients with *Legionella* pneumonia. Although there are more than 30 known species

of *Legionella* capable of causing human disease, *L. pneumophila* accounts for 80 to 90% of human infections with serogroup 1 responsible for more than 70% of these infections.

Conventional methods for the laboratory confirmation of all *Legionella* infections, including those caused by serogroup 1, involve microscopy (DFA) and/or a time-consuming cultural procedure performed on bronchoscopy samples or expectorated sputum. The advantages of the *Legionella* Urine Antigen Test are that the test is performed on a specimen collected by a non-invasive method and reliable results are available within 24 hours of specimen receipt.

As a reminder, urine specimens for the *Legionella* Antigen Urine Test may be collected in the usual sterile urine collection containers. Specimens may be stored at room temperature for several hours before transport to the laboratory. If longer transport times are anticipated, the urine samples should be refrigerated. Alternatively, the B-D urine transport container with preservative may also be used for specimen collection.

### Students Embrace Summer Learning Opportunities

By Lonnie D. Stallcup Jr., MT  
Education Services Manager

The Cicero-North Syracuse High School Extended Summer Job Shadow Program for 2008 kicked off on July 8. Kathleen Haas, Laboratory Alliance Quality Assurance Specialist, delivered a safety briefing to the students at the VA Medical Center in Syracuse.

Students visited our Operations Center laboratory, some of our Patient Service Centers and our Rapid Response Laboratory at Crouse Hospital. Of the 10 students, two spent time in our hospital-based Transfusion Services Departments and two spent time in our Phlebotomy Department. The majority of the students also visited the Hematology and Gross Pathology Departments.

The summer program concluded on July 31 at the VA Medical Center when the students shared their newly-acquired knowledge with their peers, parents, teachers and Laboratory Alliance faculty at the annual Celebration of Learning event.

The students enrolled in the BOCES Phlebotomy Program visited our Operations Center from 6-8 p.m. on July 9. In an effort to help the students understand phlebotomy's contribution to the laboratory, they were provided with a tour of the clinical laboratory.

## Featured Department



Laboratory Alliance's Central Receiving staff at the Rapid Response Laboratory at St. Joseph's Hospital Health Center is always striving to be CHAMPS. They are dedicated, hard-working and always willing to go the extra mile to do what it takes to be a winning team. They include, left to right, CRA Coordinator Brenda Jetty, MT(ASCP), Amanda Baranowski, Kimberly Crossman, Ruslan Ali-zade, Renee Strazzere, Jaclyn Fehlman, Joyce Garcia and Katie Race. (We mistakenly featured the three women on the right in our May/June issue of Lablines as part of our staff at our RRL at Community General Hospital - our apologies!) Absent on photo day were: Kathy Calarese, Sarah Chapman, Christina Hollister, Josephine Gervasi, Theodore Hile, Nadine Riche, Linda Vanderwalker and Kimberly Wagoner.

## LA Newsmakers

### New Employees

Please welcome our new employees:

At our Operations Center

**Michelle Emerson**, Medical Technologist

**Shannon Huggins**, Phlebotomist

**Mary Maher**, Phlebotomist

**William Mammone**, Courier

**Janis Nolan**, PSC Receptionist

**Brian Palma**, Laboratory Office Assistant

**Heather Stuhler**, Phlebotomist

**Denise Wood**, Laboratory Office Assistant

At our Rapid Response Laboratory  
at Community General Hospital

**Andrew Garlach**, Anatomic Pathology Processor

At our Rapid Response Laboratory  
at Crouse Hospital

**Sally Bien**, Technical Processing Assistant

**Nicole Lyon**, Medical Lab Technician

At our Rapid Response Laboratory  
at St. Joseph's Hospital Health Center

**Kelly Allport**, Medical Technologist

**Karen Davenport**, Anatomic Pathology Processor

**Pamela DelGiorno**, Medical Technologist

**Catherine Dovillers**, Technical Administrative Assistant

**Cathie Johnson**, Laboratory Office Assistant

**Linda Martinez**, Laboratory Office Assistant

**Juan Salazar**, Anatomic Pathology Processor

**Saida Shanaa**, Medical Technologist

**Kimberly Wagoner**, Laboratory Office Assistant

### Employee Anniversaries

#### July

##### 5 Years

Rose Martin

Deb Reed

Paul Vautrain

##### 10 Years

Sandy Briggs

Andrew Chidsey

Marcia Degilio

Dennis Fischer

Cornelius Hensen

Moses Hovsepian

Kathryn Lamison

Liz Madonian

Carrie Nappa

George Popp

Sue Rauer

Nancy Sniffen

Ann Sylcox

Todd Terpening

#### August

##### 5 Years

Bill Becker

Jillian Knapp

Janet Roberts

##### 10 Years

Lori Anna

Chris Garritano

Janice Gildemeyer

Jane Keeler

Ann Maltby

Erin Mauro

Jane Riffanacht

Joan Riffanacht

Gail Scully

Jennifer Walczyk

### People in the News



**Dan J. Vick, MD**, of St. Joseph's Pathology, P.C., and Medical Advisor for Laboratory Alliance's Microbiology Department, was recently appointed to the board of directors of the Syracuse Symphony Orchestra.



**George Popp**, Vice President of Information Systems/Chief Information Officer, was recently accepted as a member in the College of Health-care Information Management Executives. Also, he is now a member of the Health Care Efficiency and Affordability Law for New Yorkers (HEAL NY) Program's grant workgroups for Privacy and Security and for Protocols and Services.

In July, George became a member of the New York eHealth Collaborative's (NYeC) Policy and Operations Council. NYeC (pronounced "nice") was founded by health care leaders across the state, with leadership and support from the New York State Department of Health, as a public-private partnership that will serve as a focal point for health care stakeholders to build consensus on state health IT policy priorities, and collaborate on state and regional health IT implementation efforts.



**Juliane Breh**, MT(ASCP), has been named Transfusion Services Manager. She will be responsible for the oversight of the Transfusion Service Departments at our three hospital operations – Community General Hospital, Crouse Hospital and St. Joseph's Hospital Health Center.

Juliane's responsibilities include ensuring continuous compliance with The Joint Commission and New York State Department of Health standards of performance and establishing best practices to attain efficiency and assure patient safety.

Juliane has more than 12 years of experience as a medical technologist including several years as a supervisor. She received her Bachelor of Science degree in Medical Technology from Albany Medical Center Hospital. She is certified by the American Society of Clinical Pathologists and licensed as a Clinical Laboratory Technologist by the New York State Education Department. Juliane is an active member of the Central New York Clinical Laboratory Management Association (CLMA) and was awarded one of 10 Lyle Rosser Jr. Continuing Education Scholarships in the nation to attend the national CLMA Think Lab '08. She is also an active member of the Blood Bank Association of New York State (BBANYS).



**Chris Galloway** is the first graduate of Laboratory Alliance's Medical Technology Training Program and will receive his degree in August. He began his training with us in May 2006. Chris works in the Chemistry Department at our Operations Center in Liverpool. Congratulations, Chris!

## Calendar of Events

### Friday, Sept. 12

**Tribute Evening**, to benefit Crouse Hospital Foundation, Nicholas J. Pirro Convention Center of the Oncenter Complex, 6:30 p.m. **Laboratory Alliance is a corporate sponsor.**

### Wednesday, Sept. 17

**Light The Night** to benefit the Leukemia & Lymphoma Society, Clinton Square, Syracuse, 6:30 p.m. **Laboratory Alliance is a corporate sponsor.**

### Monday, Sept. 29

**September Song** to benefit Hospice of Central New York, SUNY Institute for Human Performance and Syracuse Stage. **Laboratory Alliance is a corporate sponsor.**

## Anti-Factor Xa Assay

*Continued from page 3*

injection of LMWH. Minimal therapeutic levels have not been rigorously defined; however, reasonable peak activity ranges are 0.6 to 1.0 IU/mL for b.i.d. (twice a day) dosing and 1.0 to 2.0 IU/mL for q.d. (every day or once per day) dosing. Trough anti-Xa monitoring may be used to evaluate for drug accumulation in the setting of renal impairment. Recommended blood collection timing for trough activity is just prior to the fourth dose and again if dose adjustment is required. Optimal anti-Xa trough activity is considered to be < 0.5 IU/mL.

LMWH can cause heparin-induced thrombocytopenia, although this is much less common than with unfractionated heparin. It may be useful to obtain a baseline platelet count prior to treatment.

The anti-factor Xa test is a complex and time-sensitive assay. Testing is offered Monday through Friday from 8 a.m.-2 p.m.

For more information, consult our website at [www.laboratoryalliance.com](http://www.laboratoryalliance.com) or contact Hematology Manager Anne Chamberlain at 410-7048.

## Community Outreach News



Laboratory Alliance participated in the 18th Annual North Country Laboratory Manager's Symposium, held on June 5 at the Best Western Inn in Watertown, NY.

*Field Services Supervisor Malinda Kuney staffed the Laboratory Alliance exhibit.*



*Ed Hogan, (left) Laboratory Manager at Oswego Hospital, congratulates Paul A. Granato, Ph.D., on a job well done for his presentation titled "Escherichia coli 0157:H7 and Its Shiga-Toxin Producing Friends."*



*Laboratory Alliance raffled a gift basket at the North Country Laboratory Manager's Symposium. Ann Marie Derecola, (right) Program Director, is pictured with prize winner Sue Faro, Hematology Section Chief at Thompson Health, Canandaigua, N.Y.*

## LABlines

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