



LABlines

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News from LABORATORY ALLIANCE of Central New York, LLC



Creating a Leaner Rapid Response Laboratory

By Lonnie Stallcup, Manager of Process Improvement

Recent construction projects at St. Joseph's Hospital Health Center (SJHHC) required Laboratory Alliance to surrender some of the space in its Rapid Response Lab (RRL). The hospital needed to widen the hallway

adjacent to the laboratory to accommodate the transportation of patients. However, Laboratory Alliance was able to acquire additional space for the RRL toward the laboratory's northern border. The expansion and reconstruction afforded the perfect opportunity for Laboratory Alliance to renovate the RRL into a more productive design.

A Lean Team began planning the laboratory redesign last November. The team included SJHCC employees Mary Ellen Milczarski, a medical technologist, Cassandra Renfer, a laboratory office assistant, David Stewart, a Lean consultant from OpEx, and me. We sought input from managers, technical supervisors and other laboratory employees at the site.

Working with a construction team while running a laboratory that operates 24/7 was extremely challenging. It had to be carefully staged. Laboratory Alliance held daily meetings with contractors and hospital personnel to assure the successful transition of the lab. Although noise and other distractions in the lab increased during renovation, laboratory personnel continued to provide the very best patient care. They are the true heroes of this project.

The layout of the existing lab did not lend itself to efficiency. Fixed casework took up valuable space and prevented laboratorians from being able to effectively help one another. Instrumentation and materials required to complete a task were not in convenient places, causing staff to walk back and forth excessively.

Once the barriers were removed, instrumentation was placed in strategic locations to allow for a linear and orderly flow of specimens throughout the laboratory. The additional space on the lab's north side was used to build new offices for St. Joseph's Pathology, P.C. and



Laboratory Alliance recently renovated its Rapid Response Laboratory at St. Joseph's Hospital and Health Center.

to expand the lab. We were also able to divide the technical lab into two areas: an automated work-cell, where 80 percent of the laboratory tests are processed, and a manual work-cell for tests that are more labor intensive.

In anticipation of an increased workload in the Transfusion Service Department, an east-west dividing wall was removed to allow that department to expand toward the lab's eastern side.

The project has been challenging but it is not complete. Improved and standardized work practices will be implemented soon. Job responsibilities will be redefined to allow for the most efficient use of personnel.

One of the principles of Lean Management is that an effective Lean program is not a project-of-the-month. It continually looks for ways to improve. Although we achieved a fabulous laboratory redesign, Laboratory Alliance is committed to continuous process improvement – a core principle of Lean Management.

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Creating a Leaner Rapid Response Laboratory

Photographs by Anne Marie Mullin, VP, Business Development and Marketing



Laboratory Alliance employees enjoy the recently renovated and expanded RRL at St. Joseph's Hospital and Health Center Central Receiving.

Left is a view of the long corridor from the Chemistry to the Hematology Departments.

Below, Laboratory Office Assistants Nikki Morales, Nichole Danzey and Trish Holt process samples in Central Receiving.



Above, Lonnie Stallcup, Manager of Process Improvement, and Maria Dillon, Rapid Response Laboratory Manager at St. Joseph's Hospital, review the laboratory's new floor plan.



Right is a view of the Blood Bank where Medical Technologists Claire Huchzermeier and Sal Banan are working.

Laboratory Alliance Opens a New Patient Service Center in East Syracuse

Laboratory Alliance opened a new patient service center at 5000 Brittonfield Parkway in East Syracuse on Jan. 9.

The center is open from 8 a.m. to 4:30 p.m. Monday through Friday. It is closed for lunch from 12:15 to 1 p.m.

The Brittonfield Medical Center is in the newly renovated building that was originally home to O'Brien and Gere.

Brittonfield Parkway connects to both Collamer and Fly Roads and is adjacent to Route 481 and the New York State Thruway exit 34A. Laboratory Alliance is in Suite A108, on the first floor to the left. Free parking is located next to the building, which is handicap accessible.

Special upgrades to the office space include a comfortable patient welcome area, private patient rooms and efficient and spacious

laboratory and administrative work spaces.

When a healthcare provider orders lab work, patients may choose the laboratory they want to perform the service. Appointments are not necessary and most medical insurance plans are accepted.

Experienced professional phlebotomists and medical technicians are always on hand and the company's couriers transport lab specimens to the main laboratory located on Electronics Parkway in Liverpool, N.Y.

In addition to the East Syracuse center, Laboratory Alliance operates 10 other patient services centers in Central New York, including locations in Baldwinsville, Camillus, Cicero, Fayetteville, Liverpool, Pulaski and four locations in Syracuse, one at each of the three hospitals.



On Feb. 8, volunteers from Centerstate CEO's Ambassador program visited 5000 Brittonfield Medical Center to welcome Laboratory Alliance to the new location. Ambassador Mary Eisert-LaMacchia from The Business Journal (front left) presented a plaque to Jeff Coyne, (front right) Laboratory Alliance's Director of Support Services, recognizing the successful growth of Laboratory Alliance. Also on hand to welcome were CEO Centerstate Ambassadors (back row from left) Kevin Magdon, DoubleTree Hotel; Lucille Browning, International Center of Syracuse; and Dawn D'Eredita-Nagen, Staffings Personnel Systems. They were joined by Laboratory Alliance's Phlebotomist Vickie Nolan and Phlebotomy Manager Carrie Nappa, with Ambassador Judy Winslow, Hunt Real Estate ERA, far right.

When you need lab tests, we're in your neighborhood.

Visit our newest location in East Syracuse! 5000 Brittonfield Parkway.

We're now open just off Collamer and Fly Roads and conveniently adjacent to Rt. 481 and the NYS Thruway exit 34A. We're on the first floor to the left in Suite A108.

**Experienced professional staff • No appointments necessary
Many locations open on Saturdays • Most medical insurance plans accepted**

We're also in Baldwinsville, Camillus, Cicero, Fayetteville, Liverpool, Pulaski and 4 locations in Syracuse



Prompt, courteous, professional and locally owned. For directions to all of our Patient Service Centers, or for more information, visit www.laboratoryalliance.com





Cronobacter Meningitis and Powdered Infant Formula

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

The Centers for Disease Control and Prevention (CDC)

and the Food and Drug Administration (FDA) have been investigating four cases of meningitis due to *Cronobacter sakazakii* that occurred in December 2011 in otherwise healthy infants.

The infections occurred in Missouri, Illinois, Oklahoma and Florida. The infant cases that resulted in fatalities occurred in Florida and Missouri. All infants consumed a powdered infant formula (Enfamil Newborn formula) which resulted in the formula being pulled from over 3,000 retailers' shelves until the batches could be tested for contamination by the CDC.

On December 30, the CDC reported that those tests were negative for the presence of *C. sakazakii*. In addition, the FDA tested factory-sealed containers of powdered infant formula and nursery water as the same lot numbers as the opened containers collected from Missouri and no *Cronobacter* contamination was detected.

However, the CDC did find *Cronobacter* in an opened container of infant formula, an opened bottle of nursery water, and rehydrated powdered infant formula used in the Missouri case. How this contamination occurred is not known but it may have been from an environmental source introduced by parents or care givers.

The CDC also tested the *C. sakazakii* isolate from the Illinois infant by using molecular genotyping analysis and found it to be genetically different from the isolate recovered from the Missouri case. The isolates from the Oklahoma and Florida cases were not available for genotyping. Based upon the epidemiologic studies and genetic analysis of the two isolates, the FDA and CDC concluded that this cluster of *C. sakazakii* meningitis infections was not due to a common source outbreak, such as contaminated powdered infant formula, and determined that these products were safe for parents to use in feeding their babies.

Cronobacter sakazakii (formerly known as *Enterobacter sakazakii*) is a ubiquitous environmental bacterium that is found naturally in soil and on plants, such as wheat and rice. It can cause rare, but often fatal, blood and central nervous system infections.

Although *Cronobacter* can cause disease in all age groups, most infections occur in infants, particularly those who have ingested powdered infant formula contaminated with the bacterium. The CDC investigates four to six reports of *Cronobacter* meningitis a year of infant infections related to formula

and has not found a powder that has tested positive for the presence of *Cronobacter* since 2002.

Milk powder is manufactured by evaporating pasteurized milk to concentrate it before spray drying. Temperatures in the milk vary throughout the process, but can reach around 90° C. *Cronobacter sakazakii* is heat sensitive and is therefore unlikely to survive the high temperatures in the milk powder drying process; however it may be found in dry food products, such as skimmed milk powder, lactose, starch, lecithin and banana powder – all ingredients that can be added to powdered infant formula.

Logically, most contaminations are most likely to originate from the general environment after manufacture before or during the packing of the product. As such, powdered infant formula is most likely contaminated with *C. sakazakii* after production since the pasteurization process is normally adequate to kill the bacterium. However, if the powder is produced using a dry blending process and not heated, *Cronobacter* can survive in the formula.

Cronobacter meningitis has an infant mortality rate of approximately 50 percent and those infants that survive may experience moderate to severe neurological impairment.

Public health authorities are continuing to monitor this outbreak. In the meantime, the CDC recommends the following measures for preventing *Cronobacter* infection:

1. Use hot water to make baby milk from infant formula powder. Water should reach a heat of 158° F (70° C).
2. Choose an alternative to a powdered form of baby milk. Liquid formula is usually sterile.
3. Follow the manufacturer's instructions for preparing baby milk from powdered formula.
4. Throw out prepared formula if you do not use it within 24 hours of preparation.

New Multiplex PCR Assays for the Improved Laboratory Diagnosis of RSV and Influenza Infection

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

Respiratory syncytial virus (RSV) and influenza viruses are major causes of human respiratory infections particularly during the late fall through early spring months. RSV infection, which presents primarily as a bronchiolitis and/or viral pneumonia, is the leading cause of lower respiratory infection in infants and young children.

Peak incidence of severe RSV disease is observed at age 2 to 8 months. Overall, 4 to 5 million children younger than 4 years of age acquire an RSV infection, and more than 125, 000 children are hospitalized annually in the United States because of this infection. This translates to 3 to 9 per 1,000 children younger than 1 year who are hospitalized annually for this condition.

Virtually all children have had at least one RSV infection by their third birthday. Adults may also get symptomatic RSV infection but the disease is less severe due to the presence of protective humoral immunity from past childhood infections. However, as one ages, this immunity wanes and the elderly, particularly those in nursing homes and extended-care facilities, are at increased risk for more serious pulmonary infection.

Influenza, otherwise known as the "flu," is an acute, contagious respiratory illness caused by influenza A, B, and C viruses. Of these, only influenza A and B are thought to cause significant disease in humans, with infections due to influenza B usually being milder than infections caused by influenza A. Influenza A viruses are further categorized into subtypes based on 2 major surface protein antigens: hemagglutinin (H) and neuraminidase (N). Common symptoms of influenza infection include fever, chills, sore throat, muscle pains, severe headache, weakness/fatigue, and a nonproductive cough. Certain patients, including infants, the elderly, the

immuno-compromised, and those with impaired pulmonary function are at risk for serious complications. In the United States, influenza results in approximately 36,000 deaths and more than 200,000 hospitalizations each year. The Centers for Disease Control estimates that up to 20 percent of the population in the United States is infected with at least one strain of influenza each year.

In 2009 to 2010, a novel influenza virus (called 2009 H1N1, or "Swine" flu) appeared in Mexico and quickly spread worldwide, causing the first influenza pandemic in more than 40 years. The influenza A H1N1 virus continues to cause disease in humans but in a much lower prevalence than the 2009 outbreak.

Laboratory Alliance has established a testing algorithm for detecting those respiratory viruses most likely to cause disease based upon specific age groups.

Since influenza virus can cause respiratory infection in all patient age groups, all nasopharyngeal specimens collected from patients regardless of age will be routinely tested for the presence of seasonal influenza A, influenza A H1N1, and influenza B.

Since RSV can cause serious disease in both the pediatric and older patient age groups, nasopharyngeal specimens collected from infants and children (<16 years old), and the elderly (>65 years old) will be tested for the presence of RSV as well as the influenza viruses.

Healthcare providers are reminded that Laboratory Alliance continues to offer a more comprehensive culture-based test for 7 respiratory viruses (RSV, influenza A and B, parainfluenza 1, 2, 3 and adenovirus), if the clinical situation warrants. This test may be requested by ordering "Respiratory Virus Culture" with final results usually available within 48 to 72 hours of specimen receipt.

Pertussis Update

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

The Onondaga County Health Department (OCHD) issued a "Pertussis Update" on Jan. 5, 2012, notifying healthcare providers that small outbreaks of pertussis have been identified in several middle schools in Onondaga County since November of 2011.

The OCHD recommended that timely diagnosis of pertussis in symptomatic patients could be most reliably achieved by using the *Bordetella* PCR test. Furthermore, the OCHD asked for the cooperation of area physicians to curtail the spread of the disease in the community by excusing patients with diagnosed or suspected infections from school or work until treatment was complete.

Healthcare providers are reminded that a large outbreak of pertussis occurred in more than five states from April to September of 2010. In California alone, over 9,500 infections were confirmed resulting in at least 11 infant deaths.

The pertussis outbreak was also documented in Central New York. From May 1 to July 31, 2010, Laboratory Alliance's Microbiology Department detected 17 percent of patient specimens (104 of 606) as positive for *Bordetella* by using their own in-house PCR assay.

Physicians and other healthcare providers who wish to order the Laboratory Alliance *Bordetella* PCR assay on their patients should collect a nasopharyngeal swab specimen using the orange color-topped specimen collector containing the black-colored charcoal transport medium.

If necessary, please consult the Laboratory Alliance website at www.laboratoryalliance.com or call Customer Service at (315) 461-3008 for specific instructions on proper specimen collection.

Welcome to our New Clients

Associated Medical
Professionals of New York
New Hartford, N.Y.

Cardiac Electrophysiology
Consultants
Syracuse, N.Y.

CNY Neurological
Consulting, PLLC
East Syracuse, N.Y.

Fayetteville Family
Physicians, PLLC
Fayetteville, N.Y.

Hospitals Home Healthcare
Fulton, N.Y.



IN THE NEWS



Dr. O'Leary recognizes Chrissy Traphagen as CHAMP at the Holiday Party in January.

Christine 'Chrissy' Traphagen Named CHAMP

Laboratory Alliance has several programs in place that encourage employee training and advancement within the company and our most recent Champ is taking advantage of this opportunity.

Chrissy Traphagen recently transferred into our Histotechnician Training Program at our Operations Center. She was previously a senior laboratory office assistant in the Central Receiving Department at our Operations Center. Chrissy was recently licensed by the New York State Department of Education as a clinical laboratory technician.

Chrissy, a Liverpool native, joined Laboratory Alliance in September 2000.

Chrissy's coworkers wrote many nice things about this most recent CHAMP, including "Chrissy always has the time to stop and help others," "She always has a positive attitude and is full of energy," "She is always consistent and professional" and "Chrissy is a pleasure to work with."

Chrissy enjoys exercising and shopping and is a wonderful hair stylist in her spare time.

Universal Cholesterol Screening Recommended for Children



A panel of healthcare experts recently recommended that all children have a cholesterol screening blood test between the ages of 9 and 11 years. The guidelines, sponsored by

early CVD or if the child has any other risk factors including hypertension, diabetes and a very high body mass index.

One in 500 kids has an inherited disorder that causes high levels of LDL ("bad") cholesterol that may require medication to control. However, since the problem doesn't create observable symptoms, as many as half of these kids don't know they have the condition. To help identify these children, the NHLBI panel made this recommendation

Research has shown that 10 to 13 percent of children have elevated cholesterol levels. Treatment for the vast majority should focus on lifestyle interventions, says Stephen Daniels, chairman of the Department of Pediatrics at the University of Colorado School of Medicine, who led the NHLBI panel. A much smaller number of those children, the ones with a genetic predisposition to high cholesterol, may need to take a statin, he says.

Until the new guidelines were released, the American Academy of Pediatrics recommended cholesterol screening in children primarily based on family history. If a child had a father who had heart disease or a heart attack before age 55, for example, screening would be indicated.

Children who had risk factors such as obesity or diabetes were also candidates for screening. The AAP has since endorsed the new NHLBI guidelines.



the National Heart, Lung and Blood Institute (NHLBI) and endorsed by the American Academy of Pediatrics, strongly recommend a one-time universal blood cholesterol screening to identify children early on who are at risk of heart disease as adults and to encourage them to change their diet and get more exercise.

Identification of children with dyslipidemias (high blood cholesterol levels) must include a comprehensive assessment of serum lipids and lipoproteins, wrote the expert panel in the guidelines, presented at the annual American Heart Association meeting in November and published in the December issue of *Pediatrics*.

The expert panel strongly recommends universal screening of cholesterol at least once between the ages of 9 and 11 and again at 17 to 21 with a nonfasting lipid profile (LP).

Before age 9 a fasting LP is needed only if there is a family history for

LA NEWSMAKERS

New Employees

Please welcome our new employees

At our Operations Center

Brittaney Barrella – Laboratory Office Assistant

Kristie Bramer – Laboratory Office Assistant

Jessi Burgess – Phlebotomist

Jolene Jordan – Laboratory Office Assistant

Van Le – Technical Processing Assistant

Nadia Mbarki – Technical Processing Assistant

Maegan McVein – Laboratory Office Assistant

Richard Rock – Courier

Andrew Schreiner – Courier

Thomas Sniffen – Courier

Kenneth Sokolowski – Courier

Gary Sparks – Phlebotomist

Carrie Wayman – Phlebotomist

At our Rapid Response Laboratory at Upstate University Hospital at Community General

Jodi Dix – Medical Technologist

At our Rapid Response Laboratory at Crouse Hospital

Paul Woods – Medical Technologist

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

Christine Augustine – Laboratory Office Assistant

Ashley Barzee – Medical Technologist

Nichole Danzey – Laboratory Office Assistant

Patricia Holt – Laboratory Office Assistant

Courtney Pomichter – Medical Technologist

Pediatricians Endorse HIV Screening for All Teens Who Live in High Risk Areas

In an effort to help stop the spread of HIV among teens, the American Academy of Pediatrics now recommends routine screening for adolescents who live in certain high risk communities.

In areas where more than 1 in every 1,000 people is infected with the virus or the HIV prevalence is unknown, pediatricians should offer testing at least once to all teens between the ages of 16 to 18 regardless of sexual history.

Read the full article to learn more, available online at <http://labtestsonline.org/news/hiv-screening-for-teens111222/>

Employee Anniversaries

January, 5 years:

Jana Goode

February, 5 years:

Brian Meaker

Kimberly Sweatland

March, 5 years:

Karen Brown

Joseph Spado

January, 10 years:

Amy Hall

March, 10 years:

Tatyana Voytovich



Entertained by 'The Billionaires'

Music performed by the band "The Billionaires" was a big hit at the Laboratory Alliance Holiday Party held on Jan. 7 in Liverpool.

An added attraction was the band's talented keyboardist Rhys Brigida, an information systems analyst at our Corporate Offices.

Laboratory Alliance employees and their guests enjoyed dinner, dancing and visiting with co-workers and friends.



CALENDAR OF EVENTS



Friday, Feb. 3

American Heart Association's "Go Red for Women" Day
Laboratory Alliance participated in this event



Saturday, March 31

Ignite 2012 Catholic Men's Conference, SRC Arena at OCC
Laboratory Alliance is an exhibitor



Tuesday, April 3

Upstate New York BioCareer Connection, Ithaca, N.Y.
Laboratory Alliance is a presenter and an exhibitor



Sunday, April 22-
Saturday, April 28

National Medical Laboratory Professionals Week
The theme is "Laboratory Professionals Get Results"



National Medical Laboratory Professionals Week (NMLPW) is an annual celebration of the medical laboratory professionals and pathologists who play a vital role in every aspect of health care.

Lab Week is our opportunity to let our clients and business associates know about our dedication and commitment to our profession and to quality patient care.

Since laboratory professionals often work behind the scenes, few people know that the critical testing they perform every day to save lives, reduces morbidity, and helps control the cost of care.

Today, with advances in analytical science and automation – and as cost pressures reduce patient stays in the hospital – our work in the laboratory is more important than ever.

Lab Week is a time to honor the more than 300,000 medical laboratory professionals throughout the country who perform and interpret more than 10 billion laboratory tests in the United States every year.

With a critical nationwide shortage of medical laboratory professionals, a degree in Clinical Laboratory Science is a smart career move since job opportunities are plentiful.



Numbers that speak volumes

- Nearly 10 million tests performed annually.
- Over 5 million tests performed STAT last year.
- Over 1 million miles driven annually by our couriers.
- Over 200,000 annual patient phlebotomies.
- Over 435 dedicated employees.
- Over 55 interfaces built to clients' electronic health records.
- 11 Patient Service Centers.
- 4 laboratory locations.

One outstanding team committed to you.



LABORATORY ALLIANCE
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Providing Central New York with excellence in laboratory medicine.
Learn more at www.laboratoryalliance.com or call (315) 461-3008.

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