



Beyond the S.C.O.P.E

A publication of the Missouri State Public Health Laboratory



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What about the Status Quo?

By: Bill Whitmar, Laboratory Director

As I am authoring this article MSPHL management is in the midst of reviewing the individual units' efficiency audits of a year ago. Specifically, we are asking the unit chiefs if audit findings and recommendations were adopted into the units' procedures or workflows, and if not, why not? Overall those recommendations were met with acceptance at or about the 75% level. Some of them were easy to adopt while others were not feasible. However there were some recommendations that were not incorporated due to reasons that I would categorize as, "not the way we've done it historically" or, "it works well now and why should we change?". While this director is elated to know that we have systems in place that work so well, I believe that we also have to look beyond the status quo and be cognizant of the fact that the future may hold in store for us scenarios that may require a change in that status quo. By investigating enhanced systems now we may be advantageously positioning ourselves in advance of that change.

Take, for example, possible federal funding changes that may begin as soon as 2014. Certain testing programs we currently support may be impacted during that funding year. By investigating how the laboratory may set up a third party billing system now, we can leverage our excellent fiscal, testing and PART staff to take advantage of the new environment. If we continue with our current status quo path we will not be in a situation to perform testing in this new arena.

The MSPHL can cite three fairly recent and excellent examples of forward thinking projects which helped position itself for the future. Those are:

- OpenELIS, the laboratory's LIMS
- The recently formed Molecular Unit
- S.C.O.P.E. Initiative

The OpenELIS system has matured over



Bill Whitmar, Laboratory Director

the past few years to include most of the clinical laboratories excluding Newborn Screening and Environmental Blood Lead. However, perhaps you might have missed its rather important new function as an electronic reporter of results. Shondra Johnson, LIMS Administrator, has worked tirelessly with numerous partners to add this functionality for the St. Louis County Health Department and plans to add to several additional counties. This electronic reporting function utilizes the submitting agency's existing electronic health records for both inbound orders and outbound reports. This is truly an amazing capability for the MSPHL and our clients! As you can imagine, electronic reporting is the future of laboratory reporting and now we possess it.

Why is the Molecular Unit included in this group? Previously, molecular testing was performed in the parent units, Microbiology and Virology. While these testing services were being performed admirably, I wanted to combine and provide those services under "one roof". In that way the new Molecular Unit could have one cadre of molecular scientists perform and be cross-trained in all assays, be they virology or microbiology-based. All of the funding and personnel time for these tests could be combined in one budget and more easily tracked.

Continued on page 2....

....Status Quo continued from page 1

Also, with the addition of both gene sequencing and pyrosequencing capability, the unit's staff could attain competency in this advanced, highly technical equipment without having traditional duties of the Microbiology or Virology Units. By having a unit specifically dedicated to molecular assays we can have a highly trained molecular staff which positions us nicely for the future of identifying infectious disease pathogens by molecular means.

And finally, the S.C.O.P.E. initiative has proven to be one of our most successful and forward-thinking programs to date. The previous MSPHL status quo of limited staff input was totally discarded when we started the Show-Me Challenge and followed up with the S.C.O.P.E.

project. The management of the MSPHL garnered the input of the entire laboratory staff and acted upon that input in a meaningful and timely way. It has led to improvements in the facility and interpersonal interactions. S.C.O.P.E. continues to this day and provides a means to work collaboratively as one voice to address future challenges as one entity rather than a loose collection of individuals.

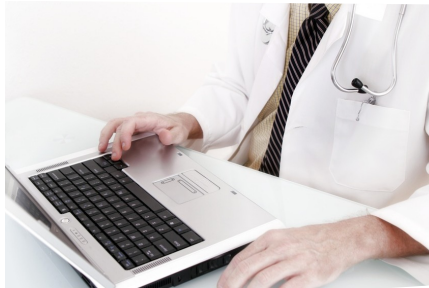
So these parting words will be to not disregard recommendations about new ways or new technology, even if there is comfort with the status quo, or if that status quo works well. Embrace the investigation of the unknown, of the new. Perhaps it is that which is new that may be our rescuer in the future.

Bill

Enhancements Made to LIMS

By: Shondra Johnson, LIMS Administrator

The MSPHL was contacted in December of 2010, by the CDC requesting participation in the Laboratory Information Management System Integration (LIMSi) project. The project involved adding functionality to OpenELIS that would allow data to be sent to the CDC for LRN assays rather than through LRN Results Messenger (RM). After several months of logistical discussions the LIMSi project began in the middle of March. Over the next nine months the MSPHL, ITSD and the CDC team were able to: 1) add the environmental sample functionality, 2) add additional fields to support LRN data on clinical samples, 3) add additional fields to support sending the required information according to the LIMSi Messaging Guidelines, 4) build an extract routine to extract the required data from OpenELIS, 5) build a new Rhapsody route that picks up the XML file from the extract routine and transforms the file into an HL7 message, 6) establish a new electronic connection with the CDC to send the HL7 messages, 7) configure LRN assays in OpenELIS, 8) and enter and send multiple HL7 messages for CDC review. On December 28th 2010 all the new functionality was implemented into production OpenELIS and was successfully tested by entering and sending two TEST messages to the CDC using the new functionality. The MSPHL continues to use this functionality to send test result to the CDC for LRN assays.



electronic data exchange project which involves several Division of Community and Public Health (DCPH) staff, ITSD staff and contractual developers, business analysts, and project managers. Funded through the Epidemiology and Laboratory Capacity - Patient Protection and Affordable Care Act (ELC - ACA) grant for the past 22 months this project involved development from the initial point of the DHSS receiving the electronic order (HL7 format), to the MSPHL accessing the electronic order through OpenELIS, the DHSS sending the electronic result to the submitter and lastly, the DHSS sending the electronic positive results to the WebSurv, which is the DHSS's surveillance system.

In addition to the development that was completed many hours were spent creating the necessary documentation and workflow processes to be used when a submitter is ready to start sending and receiving electronic data from the MSPHL. An Electronic Laboratory Reporting (ELR) HL7 Implementation Guide was prepared based from the Public Health Information Network (PHIN) guide. This guide is reviewed with appropriate staff from each submitting organization prior to electronic data exchange with the MSPHL. This same guide is used by all facilities sending reportable conditions (ELR) to the DCPH. In addition, a Message Validation checklist was developed that will be used when a submitting organization requests electronic data exchange. The checklist covers everything from initiation to completion with the implementation of the submitting organization into the DHSS production environments.

Late 2012, the MSPHL will be implementing an

MSPHL Assists Federal Agencies to Ensure Safety of National Convention Delegates

By: Pat Shannon, Environmental Bacteriology and Alan Schaffer, Chemistry

Staff from the MSPHL recently participated in activities with federal agencies to help ensure the safety of delegates to the Republican National Convention (RNC) in Tampa, Florida, and the Democratic National Convention (DNC), in Charlotte, North Carolina.

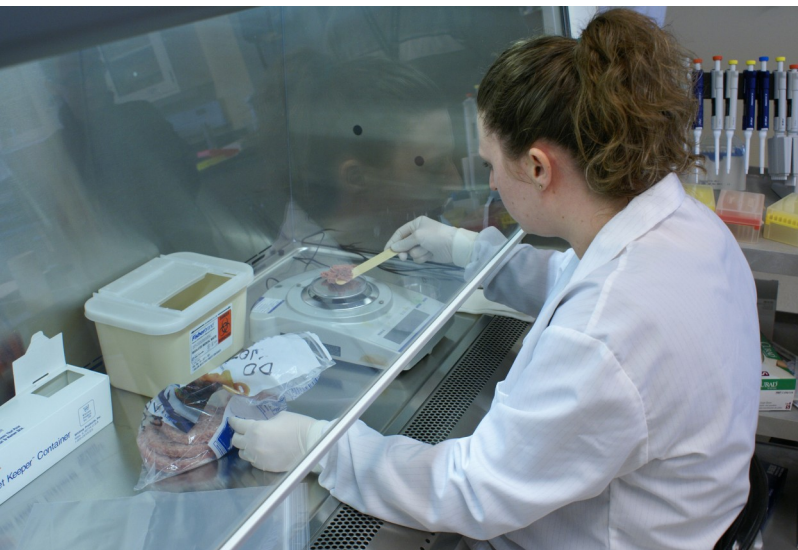
Prior to the start of the RNC in late August, the U.S. Food and Drug Administration (FDA) activated the Food Emergency Response Network (FERN). Member laboratories were asked to help test a multitude of food samples for various chemical and biological contaminants. As a member of FERN, the MSPHL's Chemistry and Environmental Bacteriology Units volunteered to assist with this project.

One week before the opening of the RNC, inspectors from the U.S. Department of Agriculture (USDA) Food Safety Inspection Service (FSIS) collected samples from various food suppliers to the RNC. Ten meat samples were shipped to the MSPHL for testing. The MSPHL Chemistry Unit analyzed the samples for arsenic and a chemical toxicant panel, while the Environmental Bacteriology Unit analyzed the samples for *Bacillus anthracis* and *Clostridium botulinum* toxins. Other laboratories participating in the project tested food samples from the same lots for additional chemical and biological analytes.

Approximately 20 state and federal laboratories participated in this project. Additional laboratories tested samples prior to the DNC in Tampa. FDA and USDA used this activity not only to ensure the safety of convention delegates, but to demonstrate the abilities of FERN laboratories to respond to national security events involving food safety.



Chris Peach, Lead Analyst for BioWatch Program, Environmental Bacteriology Unit



Ashley Mehmert, Environmental Bacteriology, weighs out hamburger meat for food testing.

The DNC also had a representative from the MSPHL. Christine Peach, Lead Analyst for the BioWatch Program (Environmental Bacteriology Unit), was asked to help establish a BioWatch testing program for the DNC in Charlotte, North Carolina. BioWatch is a U.S. Department of Homeland Security (DHS) program that serves as an early warning system for the detection of biological threat agents in air samples. This program has been in place in more than 30 U.S. cities since 2003; however, Charlotte is not one of the operational cities.

Chris, and a colleague from Indianapolis, flew to Charlotte one week prior to the DNC. There, she helped train scientists from the Charlotte Public Health Laboratory, where staff from the U.S. DHS were setting up a BioWatch testing lab from scratch. In addition, Chris helped validate the PCR apparatus used for testing and established quality control records for the start-up laboratory.

Chris served as the lead scientist and supervisor for one of the testing teams. She worked 12-hour shifts daily for the ten days of the testing project. Air filter samples were collected from approximately 40 locations throughout Charlotte and the DNC meeting sites. Samples were submitted for testing three times during each 24-hour period.

Not only does the MSPHL protect the health of Missouri citizens, it is also able to help protect citizens from all across the nation when called upon.

Acronyms used in Newsletter

APHL – Association of Public Health Laboratories
 BEHS – Bureau of Environmental Health Services
 BS/BS – Biosafety and Biosecurity
 CDC – Center for Disease Control and Prevention
 CLIA – Clinical Laboratory Improvement Amendments
 CMS – Centers for Medicare & Medicaid Services
 CVM – Center for Veterinary Medicine
 DCPH – Division of Community and Public Health
 DHS – Department of Homeland Security
 DHSS – Department of Health and Senior Services
 DNC – Democratic National Convention
 DNR – Department of Natural Resources
 EB – Environmental Bacteriology Unit
 ELC-ACA – Epidemiology and Laboratory Capacity-Affordable Care Act
 ELR – Electronic Laboratory Reporting
 EPA – Environmental Protection Agency
 EROT – Emergency Response, Outreach and Training
 FDA – Food and Drug Administration
 FERN – Food Emergency Response Network
 FSIS – Food Safety and Inspection Service
 HIV – Human Immunodeficiency Virus
 HL7 – Health Level 7
 HSEEP – Homeland Security Exercise and Evaluation Program

IHL – Iowa State Hygienic Laboratory
 ISO – International Organization for Standardization
 ITSD – Information Technology Services Division
 LIMS-Laboratory Information Management System
 LIMSi-Laboratory Information Management System Integration
 LPHA – Local Public Health Agency
 LRN – Laboratory Response Network
 MFRPS – Manufactured Food Regulatory Program Standards
 MSPHL – Missouri State Public Health Laboratory
 NARMS – National Antimicrobial Resistance Monitoring System
 NLTN – National Laboratory Training Network
 OpenELIS – Open Enterprise Laboratory Information System
 PART – Post Analytical Reporting Team
 PCR – Polymerase Chain Reaction
 PHIN – Public Health Information Network
 QSO – Quality Systems Officer
 RM – Results Messenger
 RNC – Republican National Convention
 S.C.O.P.E. – Systematically Collaborating for Overall Performance Excellence
 SDWIS – Safe Drinking Water Information System
 USDA – United States Department of Agriculture

2012 CLIA Audit Successful

The Centers for Medicare & Medicaid Services (CMS) regulates all laboratory testing, excluding research, performed on humans in the United States through the Clinical Laboratory Improvement Amendment (CLIA). The object of the CLIA program is to ensure quality laboratory testing. We welcomed our CLIA auditors to the laboratory for our biannual CLIA audit from June 18th-23rd. The auditors observed all aspects of the laboratory including the pre-analytical, analytical and post analytical processes.

We are proud to share that we had only one very minor deficiency and corrective action has already been taken to address the problem. On July 23rd we received notice that our CLIA Certificate has been officially renewed for two more years. You can find a copy of the MSPHL's CLIA certificate on the [Laboratory's website](#) under 'Certifications' below 'Related Links'.



Hooray!!

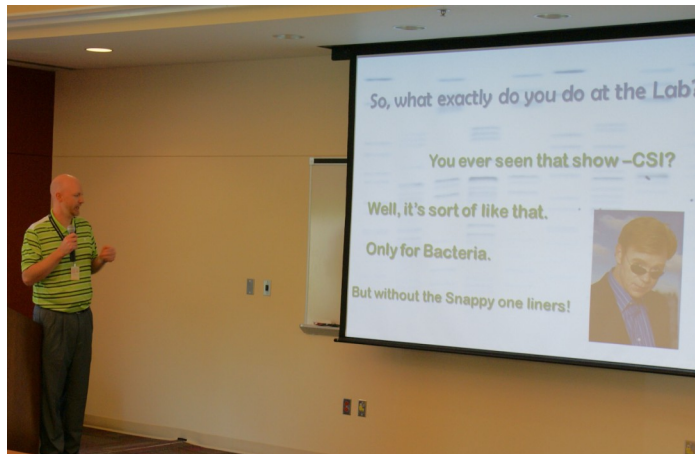
MSPHL Hosts LPHA Conference

By: Amy Pierce, EROT

The MSPHL recently hosted the “2012 Laboratory Services Workshop for LPHA Investigators” bringing together 39 attendees from 21 facilities across Missouri. The purpose of the workshop was to educate Missouri’s epidemiologists about the services the MSPHL provides, how to properly collect and submit samples and what to expect when they receive the result reports. It also provided attendees an opportunity to discuss interesting epidemiological case studies and confer with laboratory subject matter experts and senior epidemiologists.

The workshop was very well received with many attendees expressing the value of putting faces with names and better understanding the role that the MSPHL has in outbreak investigations and every day public health promotion. One attendee stated “I have only worked in Public Health for 7 years, but have attended dozens and dozens of training over a plethora of topics. This has be one of the best I’ve attended.” Another attendee remarked “Excellent day...all LPHAs should come here and experience this day. We are proud of our lab employees and the tough work they do so well.” The workshop has become an annual event and will continue to provide valuable information

about the MSPHL and the partnerships with our local public health agencies that protect the health and well-being of the citizens of Missouri.



Jason Herstein, Molecular Unit, presented information regarding molecular testing capabilities of the MSPHL at the 2012 Laboratory Services Workshop for LPHA Investigators.

Did you know that the MSPHL has their very own Recycling Program?

By: Jackie Pfenenger, Central Services Unit Chief

Pursuant to DHSS Policy 21.9 **Purchase of Recycled Content Products and Collection of Recyclable Materials** (7.15.11) and Section 34.032 RSMo each department and agency shall purchase and use recycled content paper products and, to the maximum extent practicable, separate plastics, paper, metals, corrugated cardboard, cell phone and rechargeable batteries and other recyclable items.

All proceeds from recyclable collection, in excess of costs incurred to operate the recycling program, are transferred from the Office of Administration to the Department of Social Services to be used by the Heating Assistance Program pursuant to Sections 660.100 to 660.135 RSMo.

How has the MSPHL made recycling such a success with less than 100 staff? It is through the efforts of the staff and their willingness to collect recyclable materials that make this program such a huge success.

Recycling Totals in Pounds

FY 11 FY 12

	FY 11	FY 12
Paper	2,160	4,772
Corrugated Cardboard	4,000	11,900
Aluminum	133	390
#1 & #2 Plastics	93	282
#5 & #6 Plastics (Pipette Tip Holders and Water Sample Bottles)	445	1,045



Additional information regarding the State’s Recycling Program can be found at <http://oa.mo.gov/purch/recypro.html>.

MSPHL to Receive \$1.3 Million in Federal Grants for Food and Water Testing

By: Patrick Shannon, Environmental Bacteriology and Shondra Johnson, LIMS Administrator

The MSPHL Environmental Bacteriology (EB) Unit was recently awarded a grant totaling more than \$1.1 Million over five years to implement a quality management system and achieve ISO 17025 accreditation status for its food testing laboratory. The award is part of the U.S. Food and Drug Administration’s (FDA) new focus on food safety and the implementation of the Manufactured Food Regulatory Program Standards (MFRPS).

The goal of the MFRPS is to increase the infrastructure of state food safety programs and encourage states to voluntarily implement improved food safety inspection programs for food manufacturers. One of these new standards requires each state’s primary food testing laboratory to be accredited to the International Quality System known as ISO 17025. ISO (International Organization for Standardization) establishes internationally accepted standards to ensure quality for almost any organization. ISO 17025 is applicable to

organizations performing tests and/or calibrations. ISO 17025 specifies general requirements for the competency to perform our laboratory testing. ISO certification is not new to the MSPHL, a portion of the Chemistry Unit has been ISO accredited for over the past 10 years.

The EB Unit received a \$38,000 mini-grant from the DHSS Bureau of Environmental Health Services (BEHS) MFRPS grant last year to initiate this process. With this funding staff from the EB Unit and the MSPHL Quality Systems Officer (QSO) were able to identify test methods for the scope of accreditation, develop standard operating procedures, implement a proficiency testing program for these methods, identify and implement an ISO 17025 training program for laboratory staff, perform a gap analysis of ISO requirements and develop an action plan for further implementation of ISO 17025 standards in the food laboratory.

The newest award provides the EB Unit with more than \$200,000 annually over a five year period to achieve and maintain ISO 17025 accreditation. Funding is provided for additional testing staff, continued training for the QSO and laboratory staff, development of a Laboratory Information Management System (LIMS) for the food laboratory, additional equipment and supplies. The EB Unit’s goal is to achieve accredited status by the end of 2014.

Another grant through the Centers for Disease Control and Prevention’s (CDC) Epidemiology and Laboratory Capacity – Affordable Care Act (ELC-ACA) Cooperative Agreement Program will allow the MSPHL to become the newest member of the National Antimicrobial Resistance Monitoring System (NARMS) Retail Meat Program. The EB Unit will test 40 retail meat samples monthly for *Salmonella* and *Campylobacter*. Any isolates recovered will be forwarded to the FDA’s Center for Veterinary Medicine (CVM) in Washington, DC, for antimicrobial resistance testing. The purpose of the NARMS Retail Meat Program is to identify the strains of antimicrobial

resistant bacteria in our nation’s food supply, and to determine best practices on the farm for the use of antibiotics in animals in order to limit the development of antimicrobial resistance in bacteria. This award will provide \$50,000 in annual funding for the MSPHL. Thirteen states currently participate in the NARMS Retail Meat Program.

A grant through the U.S. Environmental Protection Agency (EPA) Data Exchange Network will allow the MSPHL to implement a LIMS in the EB Unit’s water testing laboratory. The primary goals of the EPA Data Exchange Network are to provide a method for drinking water laboratories to directly exchange testing data with the state Safe Drinking Water Information System (SDWIS) and to standardize electronic laboratory data reporting in the environmental sector nationwide.

Grants Received in 2011-2012

- **\$38,000 one year DHSS Bureau of Environmental Health Services (BEHS) MFRPS grant**
- **\$1.1 Million five year U.S. Food and Drug Administration (FDA) grant**
- **\$50,000 one year CDC-Affordable Care Act (ELC-ACA) Cooperative Agreement to become member of NARMS**
- **\$165,475 one year U.S. Environmental Protection Agency (EPA) Data Exchange Network grant**

....Grants Continued from page 6

This \$165,475 funding opportunity will provide for contract developers to design and modify the OpenELIS 2 LIMS, currently in production at the Iowa State Hygienic Laboratory (IHL), for use in public drinking water testing. The IHL has also been awarded an EPA Data Exchange Grant and will collaborate with the MSPHL and Missouri Information Technology Services Division (ITSD) staff to develop a method to electronically transmit water sampling and testing data to the respective state's Department of Natural Resources SDWIS. This collaborative effort has already begun with weekly video conferences between the IHL and MSPHL/ITSD. Both state laboratories will benefit from the additional functionality developed within OpenELIS 2.

In addition to improved sample accessioning, data tracking and results reporting at the MSPHL, OpenELIS 2 will allow the EB Unit to eliminate most of its manual and paper based

reporting systems, improving efficiency and reducing the chance for reporting errors. This web-based LIMS will also allow MSPHL clients to retrieve test results through an on-line results viewer. Future development will allow the MSPHL to implement OpenELIS 2 in all areas of environmental testing, including private drinking water (bacterial and chemical testing), recreational water and food.

All of these initiatives are intertwined in that they improve quality and help move the EB Unit and the MSPHL forward. Outcomes achieved by these projects will resonate throughout the laboratory over the years to come. Whether it is to continue to open the gates further for other areas to achieve the high standards of ISO accreditation or expanding OpenELIS 2 into a viable and functional LIMS for all, together these projects will help propel the MSPHL into a continued state of performance excellence.

4th Generation HIV Testing is Coming to MSPHL

By: Dana Strobe, Immunology Unit Chief

In 2013 the MSPHL will change testing technologies for HIV to the 4th generation technology. This will allow for earlier detection of HIV infection. Using the 4th generation test a positive screening test can appear 15-16 days post infection. This test detects HIV-1 p24 antigen, HIV-1 antibodies and/or HIV-2 antibodies. A reactive test does not distinguish between antigen and antibody. However, as with all immunoassays, it is important to remember that nonspecific reactions due to other causes may occur, particularly when testing in low prevalence populations. All screening tests should be investigated with supplemental HIV-specific tests such as immunoblots, antigen tests, HIV nucleic acid tests or follow recommendations from CDC.

A contract has been awarded, but before testing can begin, training will be performed, verifications completed, and protocols written and approved.

What changes will this bring for our submitters?

- Specimens collected in the red top Vacutainer tubes (supplied by MSPHL), serum separator tubes (gold or tiger top), EDTA tubes (purple top), sodium or lithium heparin tubes (green top) or any serum/plasma specimen will still be accepted.
- Volume needs will increase. It is very important for sites to collect full tubes of blood for specimens sent to the MSPHL. For those that separate the serum/plasma a minimum of 1.5 mL will be needed. This amount will cover any additional testing that might be necessary.
- Grossly hemolyzed specimens will not be tested. Several ways to prevent specimens from being hemolyzed: (1) send specimens to the MSPHL on a daily basis by utilizing the state courier system; (2) keep specimens out of extreme temperatures. Allow specimens to clot at room temperature and then place specimens in a regulated refrigerator until ready for delivery; (3) after specimens have clotted, centrifuge and remove the serum/plasma from the clot and send the serum/plasma to the MSPHL for testing.
- Specimens can only be left at room temperature a maximum of three days. If stored at 2 to 8°C, the specimens are good for seven days. If longer storage is needed, serum/plasma should be removed from the clot and stored at -20°C. Specimen integrity is much better maintained if HIV specimens are sent to the MSPHL on a daily basis. Batching and sending samples weekly should be avoided.



Abbott Architect 4th generation combo Ag/Ab assay instrument

MSPHL Employee Named Department and State Employee of the Month

Excerpt from DHSS Publication *Snapshot* Newsletter found in March-April 2012 and May-July 2012 editions

Katy Morgan, Microbiology, was chosen as April Employee of the Month for the Department of Health and Senior Services and the June Missouri State Employee of the Month. Katy enabled Missouri to combat a nationwide *E. coli* outbreak swiftly, after it appeared primarily in St. Louis last fall. As a State Public Health Laboratory scientist, Katie worked for 20 consecutive days testing specimens for *E. coli*.

“Throughout the public health crisis, Katy made herself available,” said Steve Gladbach, chief of the Microbiology Unit. “Though a team of department scientists, epidemiologists and disease investigators worked in coordination to identify the cause of the *E. coli* outbreak, Katy’s diligence and dedication were exceptional. She ensured

consistent and dependable testing so that local, state and federal stakeholders were provided vital information to help make key public health decisions. Her performance symbolizes the motivation, professionalism and extra effort that state employees provide to protect the health and well-being of Missourians.”

Morgan and her husband, Brad, live in Holts Summit.



Katy Morgan, Microbiology Unit



Katy Morgan being recognized as the Missouri State Employee of the Month for June by the Governor Jeremiah “Jay” Nixon. Also pictured DHSS director Margaret Donnelly, MSPHL Director Bill Whitmar, Steve Gladbach, Microbiology Unit Chief; David Byrd, Adam Perkins and Russ Drury of the Microbiology Unit; Stephanie Schildknecht, Molecular Unit Chief; Jason Herstein, Molecular Unit and Katy’s Mom Debbie Hiatte.

MSPHL Offers Biosafety Training Courses to Laboratorians

By: EROT Unit Staff

Laboratorians work with potentially dangerous clinical samples on a daily basis. Unfortunately, this provides many opportunities for accidental exposures and illness. With estimates of up to 500,000 United States laboratorians working with infectious materials and cultures every day the importance of keeping laboratory staff safe from laboratory acquired infections cannot be overstated. Similarly, keeping



Stephanie Schildknecht utilizing the proper Personal Protective Equipment required in the MSPHL's Biosafety Level 3 laboratory while working on a white powder specimen.

those same infectious materials out of the wrong hands and protecting the public from malicious attacks using biological weapons is a priority of laboratories and law enforcement alike. Therefore, MSPHL is proud to have offered the course "Biosafety and Biosecurity: Minimizing the Risks in the Laboratory", affectionately known as BS/BS, to clinical laboratories for the

last three years.

Steve Hynes and Amy Pierce of the MSPHL Emergency Response, Outreach and Training Unit (EROT) deliver the full day BS/BS course to laboratorians, managers, safety professionals and others. Steve and Amy are among only a handful of trainers nationwide authorized to provide the course. It was developed and is co-sponsored by the National Laboratory Training Network (NLTN), a partnership between the Center for Disease Control and Prevention (CDC) and the Association of Public Health Laboratories (APHL).

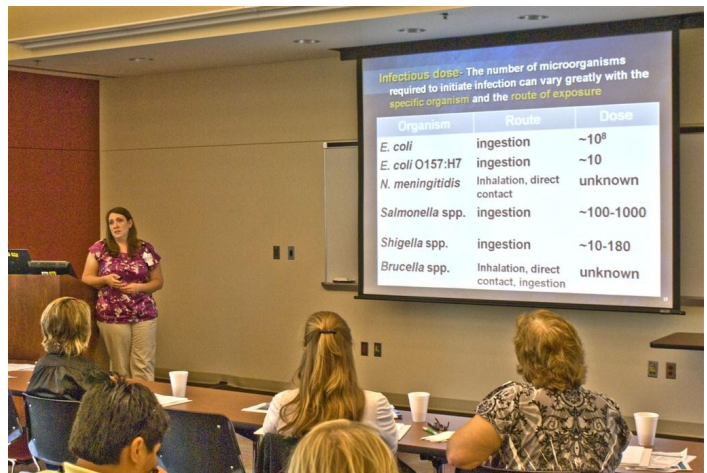
The biosafety portion of the course focuses on

"protecting people from dangerous pathogens".

Attendees are taught about the different laboratory biosafety levels, proper use of personal protective equipment and ways they can work safely within their own facilities, minimizing exposures and preventing laboratory acquired infections. The biosecurity portion of the course focuses on **"protecting pathogens from dangerous people"**. Here the emphasis is on identifying security vulnerabilities and preventing loss or theft of dangerous materials by those who wish to cause harm. Risk assessment exercises reinforce the lessons learned in both sections and give participants a blueprint for evaluating and minimizing risks in their own facilities.

The BS/BS course demonstrates the relationship between biosafety and biosecurity and how they work together to create a culture of safety in a laboratory environment. As long as the need exists and laboratorians face risks in their everyday duties in service to patient health, the MSPHL will gladly offer this training.

For information on this course visit APHL's website: <http://www.aphl.org/training/Pages/default.aspx> or contact the EROT Unit at the MSPHL: phone 573-522-1444, email: SPHLEROTUnit@health.mo.gov.



Amy Pierce, EROT Training Coordinator, presents at a local training.

Employee Spotlight: Steve Gladbach & Matt Renner

By: Debbie Burnette, Chief Financial Officer

Steve Gladbach has been employed at the MSPHL for nearly 20 years, serving as the Microbiology Unit Chief since 2006. He and his staff provide testing in the areas of Pertussis Culture, Enteric Bacteriology, Parasitology, Special Bacteriology (including *Neisseria meningitidis*, *Bacillus anthracis*, *Haemophilus influenzae*, white powder testing and bioterrorism agents), and Media production.

Steve grew up in Jefferson City having moved from Colorado at age two. He received a Bachelor's degree in Biology from the University of Missouri-Columbia. He is married to Christy and they have three children; Andrea, Jessica and Jacob.

Matt Renner is a Jefferson City High School graduate, raised here after moving from Minnesota at age four. Matt previously worked refinishing furniture when the opportunity arose to become the Media man for Microbiology in 2000. Matt produces quality agar plates, slants, carbohydrates, stabs, broths, biochemicals and stains to grow and identify bacteria in the laboratory. He and his wife Karen have three daughters; Charlotte, Olivia and Madeline.



Steve Gladbach, Microbiology Unit Chief



Matt Renner, Microbiology Unit

Matt and Steve have a few things in common; where they work, wives who are nurses, a love for music, and both are founding members of a band called Lucky. Lucky is a reference to a song that Matt wrote that they felt appropriately described the band.

For the past 18 years they have played music, beginning with jam sessions at Steve's house. They have played in Warrensburg, Jefferson City, and Columbia including several times at the Blue Note. Their genres, as Matt described, have ranged from country punk and folk rock to their current acoustical sound featuring two guitars, acoustic electric bass and the added folk-style rhythm of conga and bongos.

Growing up in their late teens listening to local garage bands such as Dashboard Mary and Algoa Road, Matt told Steve, "We're hanging out anyway. I've got a guitar, you've got a bass. We should try this." Matt started writing and soon filled a notebook with pages of lyrics. The two picked several of those pages, added a drummer and collaborated to turn those lyrics into music. Currently the band has two other members, Matt's brother, Tom, and a long-time friend, Steve Connor, whom Matt has

played music with for over two decades.

Steve is quick to say that writing and playing music is not rocket science. "The formats in rock and roll, blues and country

are pretty much laid out for you. Just try, and be ok that the first few attempts in song writing might be raw. Over the years we've developed a product that we're proud of. What most every other band in Jefferson City does is play other people's music. We have done covers, plenty of them. There is no money in playing original songs, but the satisfaction is so much more."

The band has been writing songs together for 18 years and with its current members and style for about 3 years. They can be found every other Tuesday evening in downtown Jefferson City, upstairs at Mortimer Kegley's.



Lucky playing at Mortimer Kegley's, Jefferson City, MO. L to R, Steve Gladbach on bass, Steve Connor on drums, Tom Renner on guitar and Matt Renner on Guitar.

See Lucky play live at:

<http://www.youtube.com/watch?v=tlvmWGe02Hc>

Lab Blab

Staff happenings in the Laboratory

New Employees

Kristina Cramer, AOSA-Revenues & Receivables, **Joshua Featherston**-Virology, **Christina James**, OSA-PART, **Tim Neds**-Account Clerk II-Accounts Payable & Receivable, **Erica Vaughan**-Molecular and **Melissa Walker**-Microbiology

Promotions

Lindsey Brandl, Central Services, Senior Office Support Assistant
Megan Eisterhold, Immunology, Public Health Laboratory Scientist
Brian Inman, Central Services, Administrative Office Support Assistant
Connor Mahon, PART, Senior Office Support Assistant
Melissa Reynolds, Environmental Bacteriology, Public Health Laboratory Scientist
Mindy Rustemeyer, Chemistry Unit, Senior Public Health Laboratory Scientist
Natasha Voss, PART, Administrative Office Support Assistant



Conferences and Trainings

Bill Whitmar, Director, attended the International Health and Security (IHS) conference in Washington, D.C.
Jessie Bauer, Molecular Unit, attended Influenza Pyrosequencing Training at the CDC in Atlanta, GA
Dave McGovney, Chemistry Unit, attended a FERN Gamma Spectrometry Interpretation training in Seattle, WA
Laura Naught, Quality Systems officer, attended a Procedure Manual and Training and Competency course in Denver, CO sponsored by the National Training Network through APHL
Alan Schaffer, Chemistry Unit, attended the 2012 LRN-C Technical Meeting in Atlanta, GA; attended Radiation Laboratory Preparedness for Population Monitoring at CDC in Atlanta, GA; attended the USDA FSIS grant meeting in Atlanta, GA; and attended the Alpha and Beta Emitter Analysis of Radionuclides in Food Matrices at FERN regional Training Center in Seattle, WA
Fran Thompson, Chemistry Unit, attended the Thermo Scientific Productivity Series: Ion Chromatography and Atomic Spectroscopy in St. Louis, MO
Pat Shannon, Environmental Bacteriology, attended the Missouri Milk, Food and Environmental Health Association Annual Educational Conference, Columbia, MO
Leon Luebbering, Environmental Bacteriology, attended the FDA SW Region Milk Specialist Conference in Albuquerque, NM and attended the FERN/FSIS CAP Grant Annual Meeting, Atlanta, GA.
Melissa Reynolds, Environmental Bacteriology, attended Detection of C. botulinum Toxins In Food training in St. Paul, MN
Ashley Mehmert, Environmental Bacteriology, attended the NARMS National Conference in Laurel, MD.
Alan Jarrell, TB, attended Demystifying Pyrazinamide Workshop at John's Hopkins University in Baltimore, MD
Ashley Eiler, TB, attended the 2012 National TB conference in Atlanta, GA
Pat Olson, TB, attended the Southwest Association of Clinical Microbiologist (SWACM) Conference in St. Louis, MO
Roy Tu'ua, TB, attended the 2012 National TB Conference in Atlanta, GA
Steve Hynes, EROT, attended the LRN-C Technical Meeting in Atlanta, GA and the Midwest Area Biosafety Network (MABioN) Symposium in Lincoln NE
Amy Pierce, EROT, attended the Train the Trainer: Designing and Conducting Training for Sentinel Laboratory training in Houston, TX
Amy Pierce, **Sandy Jones** and **Steve Hynes** completed a 3-day HSEEP training Course in Jefferson City, MO
David Byrd, Microbiology, attended the Southwest Association of Clinical Microbiologist (SWACM) in St. Louis, MO

Congratulations!

Thank you for your years of service

25 Years

Carlene Campbell (Newborn Screening) and
Susan Randall (Fiscal)

20 years

Colleen Donahue (Fiscal) and Steve Gladbach (Microbiology)

15 Years

Theresa Driver (Administration) and
Ray Tucker (Central Services)

10 Years

James Christian (Environmental Bacteriology, Poplar Bluff) and
Bonnie Ricks (Newborn Screening)

5 Years

Debra Martin (Newborn Screening), Jessica Meller (Molecular),
Katy Morgan (Microbiology), Roy Tu'ua (TB),
Lacey Vermette (Newborn Screening) and
Denissa Winder (PART)

The MSPHL would also like to congratulate **Dave Scott**, Fiscal, on his retirement. Dave worked at MPSHL for four and a half years as a Administrative Office Support Assistant responsible for all billings, posting accounts receivable payments and processing newborn screening form orders. He has over 17 years of service to the State of Missouri. We wish him all the best in his future endeavors.

Years of service as of July 1, 2011 through July 1, 2012.

Staff in the News

Steve Hynes, EROT, was awarded the John A. "Jack" Kruger Award for Leadership in Public Health Exercises 2011 CDC/EPA Joint Exercise. This award was presented to Steve in April during the LRN-C Technical Meeting in Atlanta, GA.

Roy Tu'ua, TB Unit Chief, was featured in Jefferson City's local newspaper *The News Tribune* on June 2nd for his work as chair of the 2012 Cole County Relay for Life where over \$300,000 was raised for the American Cancer Society.

Editorial Board for *Beyond The Scope*

Steve Hynes, Shondra Johnson, Sandy Jones, Laura Naught, Mike Massman,
Mary Menges, Amy Pierce and Bill Whitmar



The Missouri River Bridge with the
Missouri State Capitol in the background

Missouri State Public Health Laboratory

101 N Chestnut Street
Jefferson City, MO 65101

For feedback on our newsletter, contact us at

573-751-3334

or

labweb1@health.mo.gov