

# Lab Med News

The Laboratory Medicine Program's newsletter



Nov/Dec 2009

## Goodbye 2009, Hello 2010

Dear LMP Staff:

It's hard to believe that it will soon be 2010. This past year has been a monumental one in terms of the growth of Laboratory Medicine at UHN. We recently presented our first draft of our strategic plan to the Senior Management Team and will be finalizing and presenting it to the UHN Board in late January. The response we received was overwhelmingly positive and reinforced to all how important we are in the delivery of patient care at UHN and across the province.

Looking back, we have much to be proud of in 2009. Our telepathology initiative continues to move forward and we have struck up partnerships with hospitals and provincial health authorities in Manitoba and Newfoundland & Labrador assist in the building of pathology networks across Canada. We continue to focus on our primary objective of enhancing equitable access to specialized laboratory medicine across Canada. This means continuing to work with other hospitals and health agencies and practices.

This year was a time of budget cuts, which appears to be the new normal. At first, these fiscal challenges may have seemed insurmountable, but in actual fact they have spurred creativity across all of our laboratories. The creativity has come from all you - combining your expertise and experience to find the way to improve patient care.

Looking forward, we will continue to forge ahead with new strategic partnerships and remained focused on improving patient care. If we continue to put patient care at the forefront, we remain confident that we will have another successful year!

We wish all the best to you and your family during this holiday season and thank you for all your hard work in 2009.

Best regards,

Dr. Sylvia Asa

Brad Davis

## Emma Pavlov tours the facilities

A note from Emma Pavlov, Vice President, Human Resources, who toured the laboratories at TGH on December 9.

I would like to thank you all for being such wonderful hosts during my tour of the laboratories at TGH. I must say that the complexity and scope of the Laboratory Medicine Program amazes me - the two-hour tour just touched the surface of your facilities. I realize that there is so much more to see at PMH and TWH and I hope to visit the other sites in the New Year.

Every patient at UHN is impacted by the work performed in the Laboratory Medicine Program. Every single one of you plays a vital role in ensuring quality patient care. I am very proud to be working with all of you and hope you have a wonderful holiday season.

Sincerely, Emma



Emma and Michele Henry in front of the Aperio Scanner

## Core Lab Update by Tom Clancy

The Dark Report is a publication that talks about news, analysis, trends and management innovations for Clinical Laboratories. The editor of this publication is Robert Michel. I had the opportunity to listen to a talk given by Robert Michel to a large group of laboratory professionals from across Canada. The main theme that came from his talk was that although laboratory professionals are the third largest group of healthcare professionals in Canada, we are the ones that the public knows the least about. More recently, I had the pleasure of listening to the LMP Medical Director, Sylvia Asa present the LMP strategic plan to the senior management team of the UHN. Not only was it well received by the senior management team, it was also stated that it was the best presentation by a program to date. Dr. Asa and Brad Davis will soon be presenting the LMP strategic plan to the UHN Board of Directors. What I took from that presentation is that the UHN LMP is well known and will continue to grow internally at UHN, provincially, nationally and globally.

I would like to update you on a number of initiatives underway in specimen management, rapid response laboratories and the core laboratory at UHN. It has been a very busy year and I appreciate the hard work and dedication staff have shown. I would also like to again thank each and every one of you for your patience and dedication during the unexpected Ultra downtime. I anticipate that the New Year will be equally busy, but we hope to see improvements in operational efficiency once several of these projects and technologies are implemented. As usual, I welcome your feedback and encourage you to drop me a line at [tom.clancy@uhn.on.ca](mailto:tom.clancy@uhn.on.ca)

### **Laboratory Renovations**

Laboratory renovations have not been forgotten. We have experienced a few delays due to staffing changes at the project management level as well as completing the electrical assessment in the hematology area. We anticipate quotes soon and will then make decisions on the renovations.

### **Instrument Manager**

We have discussed the Instrument Manager as a middleware option with LIS based on numerous concerns expressed to us by staff. General Electric is moving away from developing and supporting I-Net and have partnered with Data Innovations to use Instrument Manager Middleware as a solution going forward. We continue to have biweekly meetings with Abbott to understand and work to improve the IM product.

### **Instrumentation**

Stago Canada has offered to upgrade our routine coagulation analyzers. The TGH routine analyzers will be replaced with STAR Evolution cop piercing units. This will greatly enhance our efficiency and, more importantly, improve employee safety. The two analyzers at TWH will also be upgraded and we are currently deciding on which models to choose.

Other instrumentation that we will be considering to evaluate or purchase in the New Year include:

BIO-RAD Bioplex 2200 Multiplex testing instrument for the immunology area.  
Cellavision in hematology.  
Somagen Capillarys and Hydrasys 2 systems for protein electrophoresis.

### **Mass Spectrometry Lab**

We are pleased to announce that Dr. Andrea Bozovic has joined our team as the mass spectrometry specialist and will assist in developing new assays and troubleshooting current assays. Our vitamin D assay is now operational and we are currently validating the pre-analytical extraction module. Once the extraction system is operationalized we will be moving our current vitamin D assay into this department.

### **Specimen Management Process Improvements**

We are engaged in a project at TWH in procuring and sending smaller batches of samples to the lab and on a more frequent basis. We continue to improve the pre-analytical travel time of from PMH to TGH. Other process improvements are forthcoming in the New Year.

## Quality Corner by Mary Fountas

When the first clinical laboratory opened at Johns Hopkins Hospital in 1896, I'm guessing that laboratorians – mainly female and trained by pathologists - reported *any* occurrence to said pathologists. Their diligence no doubt laid the groundwork for our current quality management system and we continue to benefit from reporting occurrences today. Several monikers are given to the occurrence: “non-conformance” (with or without the hyphen), “non-compliance” (ditto re: the hyphen), and “incident” are a few, though there are others still. No matter what we call them, occurrences and how they are managed are an integral building block of a quality management system.

### QSE: Occurrence Management

The CLSI global consensus guideline regarding quality management systems (HS-1A) states that an occurrence management system should provide for the capture and study of occurrence information so that systemic problems can be identified after which work to remove the cause and, therefore, lessen the chance of recurrence can begin. The occurrence management program should be linked with the organizational risk management program.

Here at UHN, all staff, including laboratorians, must complete an Incident Report eForm (we've gone with the *incident* moniker) when any unexpected, unusual or unplanned event or near miss affecting or potentially affecting a patient, visitor, staff or the hospital generally occurs. A noteworthy exception to the use of the eForm to document unexpected outcomes is occupational injury which requires a different process and form.

The severity of an incident at UHN is typed as one of: Critical, Severe, Moderate, Minor, Near Miss/Potentially Severe or Near Miss. Determination of the severity typing for an incident considers the actual significance of outcome (e.g. impact on the patient) or what the potential significance may have been if good fortune had not eliminated or lessened the impact. Both the initiator of the report and the manager of the area where the incident occurred assign a type.

Completing the incident eForm is fairly easy as the application leads you through the fields you need to complete. Remember to stick to the facts, do not offer opinions and select the appropriate manager for the “Manager where the incident occurred” field – some help with this: please enter either Risk Management or Mary Fountas into that field if you are not sure of the name of the manager where the incident occurred. Risk or I will ensure the incident is reassigned to the appropriate. The manager of the area in which the incident originated needs to be allowed to understand what happened and to identify and apply corrective action when appropriate so they should be completing the Manager Report part of the form.

What about the lab form?

One of the quality initiatives for LMP this year will be to move away from using the internal form(s) and move to entering as many occurrences using the eForm as possible. This initiative has been in progress for some time under the stewardship of the Quality Management Committee and will be one of the areas the new Quality System Documents Working Group is tackling. This group has representatives from each area working on global processes and documents for LMP.

#### More information or help on:

- Completing the eForm
- Clinical Risk
- Management and Quality of Care Committee

Visit the UHN Intranet: Departments/Clinical Risk Management

### Review eForm

Occurrence management programs also require the identification and implementation of corrective action when appropriate. The UHN Review eForm is automatically triggered when the severity of the incident is rated as Critical or Severe by the manager where the occurred. All critical and severe review forms are tabled at UHN's Quality of Care Committee for any further follow up or to identify any corrective action that should be applied systemically, i.e. to all of UHN.

As best practice dictates through HS-1A, UHN has an occurrence management system that provides for the capture and study of occurrence information so that systemic problems can be identified and recurrence avoided and which is linked with the organizational risk management program through the Quality of Care Committee.

## Worth repeating: Reporting adverse reactions critical

Ready access to blood products - such as red blood cells, platelets, and plasma - has revolutionized the medical profession. Many medical and surgical treatments would simply not be possible without blood transfusions.

As with all medical therapies, however, transfusion carries risks, and the role of the UHN Hospital Transfusion Committee is to make those risks as small as possible.

"If you ask most patients what their greatest worry about receiving a blood transfusion is, many would answer the risk of transmitting the virus that causes AIDS or hepatitis C," says Dr. Jacob Pendergrast, Hematologist, UHN Blood Transfusion Service, Laboratory Medicine Program. "Fortunately, the risks of being infected with one of these diseases are lower than it has ever been: approximately 1 in 2.3 million for hepatitis C, and 1 in 7.8 million for HIV."

Although still very rare, the greater risk of transfusion is an acute reaction, one that occurs within hours of the product being given. Examples include hemolytic transfusion reactions due to serologic incompatibility, septic transfusion reactions from a contaminated unit, and transfusion-related acute lung injury (TRALI). TRALI, a condition in which patients develop non-cardiogenic pulmonary edema from a blood product, has recently emerged as the number one cause of transfusion-associated mortality.

Highlights of this policy include a new classification schema to differentiate benign from more serious reactions, algorithms regarding when to return a product to the Blood Bank and when to order additional tests. A transfusion reaction investigation can now also be ordered through Electronic Patient Record (EPR), and the patient's clinical status can be documented on a revised transfusion mount sheet. Final interpretation of the acute transfusion reactions will be reported in EPR and reviewed by the Hospital Transfusion Committee.

Dr. Pendergrast recalls a recent example of a patient receiving a blood transfusion following surgery.

"After the surgery, the patient went into severe respiratory failure - at first clinicians didn't realize what had happened, but it quickly became clear the patient was suffering from transfusion-related acute lung injury," he says. "The adverse reaction was reported to the staff at the Blood Bank, who then worked with Canadian Blood Services to identify the implicated blood donor so that another patient wouldn't be put at risk."

Dr. Pendergrast emphasized that optimal management of transfusion reactions requires close collaboration between Blood Bank and the clinical staff it serves. Good communication between the clinician reporting the reaction and the Blood Bank staff who receives the call is vital.

"There is always a tendency for us to 'silo' ourselves off, especially in big hospitals," he says. "But in the case of acute transfusion reactions, the labs and the clinicians not only need to act quickly, they need to act as a team. In cases such as TRALI, it could mean life or death.

Have a question for senior leadership? We'd like to hear from you... Our communication vehicles, like our operations, improve with your feedback. Send ideas, questions or comments to Karen Kelly, 16-6884 or via email at [karen.kelly@uhn.on.ca](mailto:karen.kelly@uhn.on.ca)



## LMP in photos: Holiday tea and door decorating competition

On December 16, the Laboratory Medicine Program held its annual holiday tea. The event, hosted by the LMP senior team and the program's Diversity Council, also announced the winner of the door decorating contest. Cytology blew judges away by their tweaked version of Christmas carols (to reflect laboratory medicine) and their festive display. Thank you to all who participated.

### WINNER

