



MLT

Analyzer

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President's Message

I find it hard to believe as I am writing this that my term as President is more than half over. I find myself saying, more than ever, where does the time go? Although it is summertime, there has been a lot of activity in the NBSMLT. The legislation committee has been meeting regularly, working on the "rules" for the Society. The Rules are a framework that puts the "Act" in language that is easier to understand so there is less ambiguity. It is a daunting task, but one which will make doing society business easier for future Board members.

The Advisory Committee on Regulation and Professional Practise has been working to clarify some of the wording for the professional development guidelines. There are minor changes to wording that emphasize the need for documentation to accompany the application.

The Congress Committee has been busy providing input to the CSMLS for the 2005 Congress website that will probably be available by the time you are reading this, at www.csmls.org. The CSMLS has hired a congress planner, Michelle Everets, whose job will facilitate a merging and redistribution of responsibilities regarding the national Congress. Many of the roles she will be responsible for, in future congresses, are already underway with our committee. We expect that her new position will ensure a more seamless and productive congress planning experience in future. The Congress sub-committees have not been idle, though the summer has provided some downtime. In September there will be many deadlines identified. With a national Congress there are many details that need to be hammered out to meet a national timeline and allow technologists across the

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A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.

Winston Churchill

President's Message

(Continued from page 1)

country access to information, with enough time to allow for planning to attend.

I'd like to congratulate the successful candidates for the CSMLS certification exams. There were seventeen names supplied by CSMLS, to the Registrar, of general RT's and one name of a cytology RT. As well, there were two lab assistants who passed the CSMLS MLA certification exams. Congratulations and welcome!



Bernadette Muise, BSc. MLT
NBSMLT President 2004

As another school year begins, I urge you to take notice of the educational opportunities that present themselves. A Maritech registration form will be included in this issue. Many correspondence courses begin in the fall and the module courses offered by CSMLS are more manageable than some of the longer more traditional courses. I invite all of you to challenge yourselves professionally this year.

Congress 2004 in Saskatoon

Congress 2004 in Saskatoon was busy, enlightening and entertaining. There was a significant contingent from NB able to attend. Paul Green was invited to attend by the CSMLS awards committee. Paul was presented with the David Ball Memorial award for community service. Bernadette Muise and Randi Hayes attended as official representatives of the NBSMLT. Susan Atkinson attended as a CSMLS Bilingual director and Congress 2005 Chair. Congress 2005 committee members Marty White, Colleen Moran, Jim Sloan, Charlene Collins, Coral MacRae, Suzanne Mac Fadden and Anne Robinson were also able to attend.

The main focus of the congress committee was to promote Congress 2005 in Moncton. Their aim was to make our conference appealing and, dare I say it, even irresistible to as many of the delegates in Saskatoon as possible. Judging from the preliminary response I'd say they did a wonderful job.

The adventure began with the core committee thinking up a gimmick to catch the attention of the delegates and exhibitors. Well, they did! The Congress 2005 booth featured a dinghy, complete with oars, and fishing net with various

shells and fish caught in it. The committee sported white sailor hats with congress pins attached. We were unmistakable. Did you know that the lead weights sewn into fishing nets would cause your carry on baggage to be searched??



At the opening of the trade show our very own Captain, Susan Atkinson, our mermaid, Coral MacRae and Jim Sloan, dressed as that famous pirate Captain Morgan; complete with a stuffed monkey on his shoulder; meandered through the crowd distributing gold coins (chocolate is always welcome). They became immediately recognized as ambassadors for the Congress 2005. We had many visitors to our display booth, and many of them expressed a desire to come east for our event. We smiled and joked and promoted during the trade show; but we didn't stop there, to each event we attended, we wore our sailor hats and they were noticed!

(Continued on page 3)

Congress 2004 in Saskatoon (cont.)

(Continued from page 2)



in a different way than you do when you attend in a working capacity. You take note of things from a different perspective. As a delegate, content is most important; from a planning perspective, you are checking out the size of the lecture rooms, the proximity of bathroom facilities, coffee break and lunch offerings, the presentation equipment, the length and content of lectures and a million other details hoping that when your time comes you won't overlook anything that will make the conference run more smoothly.

In one respect, Saskatoon was unlucky with the weather. It was damp for most of the conference. There was one outdoor event scheduled which had to be rearranged at the last minute, the horse races were cancelled, but they had a contingency plan, where the races were

watched on television. The dinner was served as planned and everyone had fun though in a slightly different way than first anticipated. The other outdoors event was fortunately held the evening that the sun came out and the temperature was very pleasant. We visited a heritage site where the first nation peoples used to herd buffalo over a cliff, called a buffalo jump. There are several of these buffalo jumps in the western provinces. The evening was comprised of a tour of the site with presentations on tipi making, herding of buffalo and finally a display of first nation ceremonial dancing. A delicious dinner was also served on site. The weather is one of the things over which the committee has no control. In planning social events you have to ensure that the weather won't seriously impact the level of participation; another lesson to remember.

We left Saskatoon, full of enthusiasm for our plans, but also very tired. The committee took a much needed, break during early July but with deadlines fast approaching for the fall, meetings are already scheduled for August and September. We have had tremendous support from the members of the NBSMLT around the province and as we get closer to the event we will be calling on many more of you to help out.

Congress in Moncton 2005 May 28th - June 1st

Election Information 2004

The time is here once again for the nomination of **President Elect** for the New Brunswick Society of Medical Laboratory Technologists.

The **Nomination Committee** requests that you put forward names of NBSMLT members to stand for this important position. It is an opportunity for you to nominate technologists with a vision for the future, an individual who will be

able to direct the Society's affairs in these interesting and challenging times.

This will be a three year term: the first year (2005) the technologist will serve as President Elect, the second year (2006) he/she will become President of the Society and the third year (2007) this individual will serve as Past President.

Congratulations !!

David Ball Award Recipient - Paul Green

On June 14, 2004 at the National Congress in Saskatoon, **Paul Green** was awarded the David Ball Community Service Award.

The CSMLS Board of Directors has established this special award to recognize Medical Laboratory professionals who volunteer their time and talent to make a difference in their communities.

The award is named in honor of former CSMLS President David Ball who was a selfless volunteer. This award is presented annually at the CSMLS Congress, with travel and accommodation costs paid by CSMLS.

Nominations are submitted by CSMLS members and require a detailed citation accompanied by letters of support. Mr. Green is active in his community of Perth Andover serving various groups including the local fire department, curling club



and church. He works at Hotel Dieu of Saint Joseph, Perth Andover as the Chief Technologist. Congratulations Paul.



Congratulations to: **Maria Aguirre** who recently passed her CSMLS Certification exam. Maria Aguirre is from Columbia and went through the Prior Learning Assessment process by which the CSMLS determines if the qualifications and training the foreign trained technologist has received are sufficient to allow her to write the CSMLS certification examinations. She is employed at the laboratory in Perth Andover.

Submitted by
Pat Stone

Case of Antibody to High Incidence Antigen

Anne Robinson and Bernadette Muise

A 68 year old male patient was admitted to the Emergency department on June 17th as a transfer from another facility. The testing performed at the referring hospital indicated that the patient was Group B, Rh Positive with a negative antibody screen. The antibody screen was performed using the gel method. He was transfused with 2 units of Group B Rh negative Red Cell Concentrate (RCC) and 4 units of Group O Rh positive RCC in the ambulance enroute. The diagnosis was abdominal aneurysm (ruptured).

The initial laboratory results were not done until the patient was actually in the Operating Room(OR) :

Hgb 109 g/L
Hct 0.319 L/L
Plt 85×10^9 /L
PT 15.2 seconds
INR 1.41
aPTT 30.0 seconds
CK 437 U/L
CKMB 28.5 (normal range <5.0 ng/ml)
Gr & Rh B Rh Positive
Antibody Screen LISS tube method was Negative.

During surgery he was transfused with 3 units of Group O Rh Positive RCC, and 4 units of Fresh Frozen Plasma Apheresis Group B. He was transferred to the Surgical Intensive Care unit. Post op lab results June 18th 0855:

Hgb 99 g/L
Hct 0.292 L/L
PT 15.3 seconds
INR 1.42
aPTT 29.5 seconds
CK 1445 U/L
CKMB 157.5 (normal range <5.0 ng/ml)

On June 19th, the patient's haemoglobin was 84 g/L, Hct 0.248. He was transfused with 2 units of B Rh positive RCC. On June 22nd, a request was made for a unit of RCC. A Type and Screen was performed using solid phase screening technique and the antibody screen was found to be negative. 1 unit of B Rh negative RCC was transfused.

On July 1st, Hgb. 92 g/l Hct. 0.277 and the request was made for 2 units of RCC as the patient was possibly to return to the OR; and his condition was unstable.

When the type and screen was performed, again using solid phase technique, the antibody screen at this point was positive - S1 4+; S2 4+. The solid phase antibody identification showed 4+ in all cells, except the auto control. The Direct Antiglobulin Test (DAT) was micro positive with complement only and the auto control was negative. Panels using Saline Indirect Antiglobulin test (SIDAT) method, Low Ionic Strength Solution (LISS) and papain treated cells were all positive. The reactivity was also present at 15 degrees Celsius. A titration was performed to rule out High Titre Low Avidity specificity; and the results were not consistent with HTLA reactivity. The patient's pre transfusion specimen at the referring hospital was antigen typed and found to be:

DCe/dce, Fy^{a+b+}; JK^{a+b+}, ss, NN, P₁+; & K neg

The nursing unit was notified that the patient had an unidentified antibody to a high incidence antigen and his specimen would need to be referred for identification. The technologist then cross-matched the patient's plasma, with all of the Group B and Group O units available in the blood bank. Canadian Blood Services (CBS), Saint John Centre, was contacted and sent segments, which were cross-matched with the patient's specimen. In testing 170 units of blood, 1 unit was found to be compatible for the patient. One of the patient's siblings, was tested on July 3rd and his sample was found to be incompatible with the patient.

The attending physician was consulted with regard to the risks and benefits of transfusion of the patient at this time. The unit was transfused without incident. The patient's haemoglobin level remained stable at 83g/l. Unfortunately the patient succumbed as a result of complications from the original underlying condition.

There is a commercial reagent "W.A.R.M." manufactured by Immucor Inc. sometimes used to resolve serological problems resulting from autoantibody complexes coating the red cells. While some autoantibodies have a single specificity; it is more common that the specificity cannot be determined without the use of rare cells. The autoantibody can

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Case of Antibody to High Incidence Antigen

Anne Robinson and Bernadette Muise

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often be removed from the red cells by treatment with enzymes and heat; which then facilitates identification of any underlying allo-antibodies in the auto adsorbed sample. This commercial reagent which is composed of dithiothreitol (DTT) and cysteine activated papain in a phosphate buffer is based on the ZZAP reagent principle. The proteolytic activity of the "W.A.R.M." reagent causes enhancement of Rh antigens, destruction or alteration of enzyme sensitive antigens, such as in the Duffy system or the MN system. The dithiothreitol portion of the reagent causes denaturation of the most common antigens in the Kell system.

In this case, because the DAT was negative, there was probably no autoantibody present. This reagent was used to treat the antigens on panel cells to determine if the alteration of the antigen sites on the cells would make any difference in reactivity. The treated panel cells when tested by indirect antiglobulin test (IAT) showed no reactivity. This lack of reactivity indicated specificity for antigens in the Kell system, which had been denatured by the "W.A.R.M." reagent.

The Kp^b antigen has an incidence of 99.9 % in the

population and is denatured by DTT, therefore it was presumptively identified as the antigen to which the antibody present in the sample was reacting.

A sample was referred to CBS in Ottawa on July 5th for antibody identification. On July 7th, the reference lab confirmed that the specimen demonstrated anti Kp^b specificity and that the unit, which was cross-match compatible on July 3rd, was in fact, Kp^b negative, as was the patient.

Cooperation between several institutions made this uncommon experience less harrowing. The technologist at the referring hospital, provided pre-transfusion antigen testing on the patient. The Dr. Everett Chalmers Hospital provided the "W.A.R.M." reagent which allowed a preliminary identification to be reached. CBS Saint John provided large numbers of segments for testing with the patient specimen; the CBS reference lab in Ottawa, provided the results of the identification studies in a very timely fashion. Consultation with the Immucor technical specialist, Eric Ching, was helpful as well. Cases such as these, thankfully rare, are more easily resolved with the participation of many key individuals.



New Brunswickers in Saskatoon 2004:

Front Row: Paul Green, Bernadette Muise, Susan Atkinson, Charlene Collins, Anne Robinson, Coral MacRae Back Row: Suzanne MacFadden, Marty White, Randi Hayes, Colleen Moran, Jim Sloan



MARITECH 2004

NOVEMBER 22 - 24 2004

CASINO NOVA SCOTIA HOTEL

PERSONAL INFORMATION

NAME BADGE DATA

CSMLS No: _____

Surname _____ First Name _____
 Street _____
 City _____ Province _____
 Postal Code _____
 Telephone _____
 E-Mail: _____

Name _____
 Title _____
 Place of Employment _____
 Department _____

**Confirmation by E-Mail only.

REGISTRATION

Early Registration on or before **November 1 2004**

<u>EARLY</u>	<u>1 DAY</u>	<u>2 DAY</u>	<u>3 DAY</u>	<u>LATE</u>		
Member:	\$86.25	\$172.50	\$258.75	Member:	\$115.00	Per Day
Nonmember:	\$115.00	\$230.00	\$345.00	Nonmember:	\$115.00	Per Day
Student:	\$11.50	\$23.00	\$34.50	Student:	\$11.50	Per Day

Registration fees includes 15% HST

SOCIAL

Back To The 70's	Nov. 21	\$17.25		
Exhibitor's Nights "Here and Now"	Nov. 22	No Charge	Attending?	Yes ___ No ___
Maritech Dynasty 2004	Nov. 23	\$40.25		

Social events includes 15% HST

Hotel Accommodations:

Casino Nova Scotia Hotel
Reference Maritech 2004 with reservation

PAYMENT INFORMATION

Registration _____
 Social _____
Total _____

Cheque payable to: **Maritech 2004**
 Mail To: Maritech 2004
 PO BOX 60012
 Halifax Nova Scotia
 B3H 4R7
 fax: (902) 473 - 4432

Payment must accompany registration form
 Payment by cash or cheque only

MARITECH MONDAY, NOVEMBER 22, 2004

Opening Ceremony & Introduction of Keynote speaker

Keynote Address

Dr. Nuala Kenny

Refreshment Break

Room 1 Biochemistry

Dr. Roland Jung
“Laboratory Utilization
Management in a
District Health
Authority-Chemistry”

Room 2 Hematology

Dr. Wenda Greer
“New Developments
in Molecular
Diagnosics for
Hemato-Oncology”

Room 3 Anatomical Pathology

Brian Hewlett
“Tissue
Fixation”

Room 4 Microbiology

Dr. Joanne Langley
“Are We Ready for
Emerging Infectious
Diseases?”

Room 5 Transfusion Medicine

Sue Smith
“Canadian Blood
Services-Delivering
a Better Blood
System: Customers,
Collections,
Communities”

Room 6 Cytopathology

Dr. Martin
Bullock
“Salivary Gland”

Lunch Break

Moira
MacLaughlin
“Forensic
Pathology
Anthropology”

Cheryl Brine
“Yeast Identification”

Dr. Maureen
Baikie
“West Nile Virus”

Panel Discussion
Dr. Ostry

Moira
MacLaughlin

Dr. David Haldane
“Sexually Transmitted
Diseases”
Ms. Debbie Anthony
“Respiratory Viruses”

Victoria Hurlbut
“Conquering the
Quality Mountain:
Mapping the
Quality System
Course”

Panel Discussion
Continued

Refreshment Break

Dr. Vernon
Bowes
“Forensic
Science
Pertaining to
Pathology”

Linda Best
Geraldine Cooper-Lesins
Helicobacter pylori: “A
Review of Resistance and
Susceptibility
Methodologies”
Linda Best
Debbie Anthony
“Respiratory Viruses-
Methodologies”

Joan McLeod
“Interesting Case
Studies:
Automation vs
Manual Testing”

Dr. Rob Grimshaw
“Future of Cervical
Screening in Nova
Scotia”

Independent Break

Exhibitors Night

0900-
0915
0915-
1000
1000-
1030

1030-
1130

1130 -
1300
1300-
1400

1400-
1500

1500-
1530
1530-
1630

1630-
1800
1800-
2200

MARITECH TUESDAY, NOVEMBER 23, 2004

General Session Dr. Francoise Baylis

0830 - 0930		Refreshment Break					
0930 - 1000		Refreshment Break					

	Room 1 Biochemistry	Room 2 Hematology	Room 3 Anatomical Pathology	Room 4 Microbiology	Room 5 Transfusion Medicine	Room 6 Cytopathology
1000 - 1100	Dr. Kent Dooley "Neonatal Clinical Chemistry"	Trefor Higgins "The H in HPLC Really Stands for Hemoglobin Analysis"	Heidi Sapp "The Many Faces of Colitis"	Dr. David Cone Rosemary Drisdelle "Forensic Parasitology: When Parasites Turn Bad"	Wendy Turner "Hospital Customer Service Strategies"	Dr. Rebecca MacIntosh "GI"
1100 - 1200	Dr. Joanne Cadeau "Hemoglobin A _{1c} : Harmonization within Canada Standardization Internationally?"	Janet Milne "Platelet Function Analyzer (PFA-100)"	Rob Macaulay "Neurological Disorders of the Brain"	Gail Drisdelle "Laboratory Acquired Infection and Infectious Dose"	Wanda Thomas "IVIG Dollars and Sense: How to make a difference"	Margery MacIsaac "QA Guidelines, Updates on GCSP"
1200 - 1330	Lunch Break					
1330 - 1430	General Session – CSMLS (Kurt Davis)					
1430 - 1530	Dr. Richard Norman "Metabolic Basis for the Investigation of and Prevention of Kidney Stones"	Dr. R. Juskevicius "ALL and Morphology"	Marmie Wood "Lung Tumors The Good, The Bad and The Ugly"	Carol Pelton "TB Past and Present"	Pegi Wilson "Specimen Acceptance & Rejection Criteria in the Blood Bank Laboratory"	Dr. Penny Barnes "Breast"
1530 - 1600	Refreshment Break					
1600 - 1700	Pam Dagenais MLT "Drugs of Abuse"	Dr. Irene Sadek "Flow Cytometry"	Margaret Martin "Electron Microscopy"	Judy Arbique "Laboratory Bioterrorism Preparedness"	Marina Hamilton "The Provincial Blood Coordinating Program: Avoiding the blood shed"	Dr. Laurette Geldenhuys "Urinary"

0830 -

0930

General Session
 Dr. Colleen O'Connell
 Healing Hands in Haiti

0930 -

1000

Refreshment Break

Room 1
Biochemistry

Room 2
Hematology

Room 3
Anatomical Pathology

Room 4
Microbiology

Room 5
Transfusion Medicine

Room 6
Management

Dr. Albert Fraser
 "Tandem Mass Spectrometry For Transplant Drugs"

Dr. S. Couban
 "Bone Marrow Transplant Program"

Alma Cameron
 Lynn Archibald
 "The Role of the Pathology Assistant How Gross Is It?"

Dr. Shawn K. Murray
 "Why Men With Newly Diagnosed Rectal Cancer Should Undergo Prostate Cancer Screening (Serum PSA, Prostate Biopsies) Prior to Surgery (Rectal Resection)?"

Dr. Kevin Forward
 "VRE, MRSA and Beyond"

Dr. Patrick Crosskerry
 "Error in the Hospital Laboratory Setting"

Mary Godwin
 "Recruiting Medical Laboratory Technologists to Nova Scotia"

Dr. Ricardo Rendon
 "Clinical Applications and Controversies of PSA Testing"

Pending Confirmation

Dr. Shawn K. Murray
 "Why Men With Newly Diagnosed Rectal Cancer Should Undergo Prostate Cancer Screening (Serum PSA, Prostate Biopsies) Prior to Surgery (Rectal Resection)?"

Gina Pelham
 Lynn Amiro
 "EPA 1623 Water Testing for Giardia & Cryptosporidium"

Dr. Irene Sadek
 "TBA"

Bryan Crocker
 "Laboratory Information Systems to Support Business Planning and Operational or Strategic Decision Making"

1200 -

1330

1330 -

1430

Lunch Break

Gerald Myers RRT, CCP
 "Acid Base Balance and Cardiopulmonary Bypass"

Pending Confirmation

Dr. Lynn Johnson
 "Infection Control CSD"

Dr. Tim Mailman
 "Current Topics in Pediatric Microbiology"

Dr. Heather Hume
 "Buffy Coat Platelets – Why, How & What it Means for You and Your Patients"

Sheila Woodcock
 "An Action Plan to Implement ISO Quality Standards"

1430 -

1600

Closing Address
 Dr. Michael Leiter

From the Editor:

It has been a busy summer and everyone seems to have taken a well-deserved break. With fall and the school season beginning again, many of you have begun the round of fall activities revolving around school and hobbies; take the time to do something to enhance your professional development...read an article, take a course, attend a seminar.

Maritech is being held November 22-24 in Halifax. Have a look! It promises to be both interesting and enjoyable.

As always, the editor is interested in your opinion and ideas, as well as any articles you might care to write. This is the forum for communication between technologists and the Board of Directors of the NBSMLT.



Send any submissions to:

Bernadette Muise
Transfusion Medicine
The Moncton Hospital
135 MacBeath Ave, Moncton NB
E1C 6Z8
Email : Analyzer@nbnet.nb.ca

***Deadlines for submissions for
the MLT Analyzer 2004:***
Issue # 4 October 22, 2004



Newly Certified Medical Laboratory Assistants

Two candidates from Southeast Regional Health Authority challenged the CSMLS Medical Laboratory Assistant certification exams held in June 2004 and were both successful. Congratulations to Starr Holmden and Suzanne Dupuis who are presently employed on the Phlebotomy team at The Moncton Hospital.

The voluntary certification program is designed to provide a professional credential for those individuals who are practising as medical laboratory assistants in the workplace. There are a set of standards and competency profiles available from the CSMLS. Lab assistants who have

graduated from a recognized program, as well as those who have no formal training but a letter from their supervisor and documentation to support their experience, may be eligible to sit the MLA certification exams. For further information contact the CSMLS at www.csmls.org.



Congratulations !!

*Maria Aguirre
Patsy Charest
Christopher Corey
Angeline Doucet
Nicole Doucet
Tanya Dupuis
Christina Hermitage*

Newly Certified Technologists

*Jennifer Landry
Sylvie Leger
Linda Mann
Kelsey McCulley
Debra Millican
Sylvie Robichaud
Shannon Rouzes*



*Dawn Sypher
Christine Theriault
Leon Wayne
Jan Aucoin (Cytology)*

Change of address information must be sent to both CSMLS and NBSMLT offices.



Please remember to include all necessary documentation with your PDP applications; this will prevent any additional delay in the processing. If you wish original documents to be returned, please include a stamped self-addressed envelope.

Many thanks...your ACR&PP committee.

Upcoming Events you won't want to miss!!

Newfoundland Conference, St. John's, October 20-23, 2004
More to Explore in 2004 www.janus.northatlantic.nf.ca/~nlst

Maritech 2004 Halifax, NS November 21-24, 204
Celebrating the Past - Embracing the Future www.nscmlt.org

CSTM 2005 Banff, Alberta, April 21-24, 2005
Mountains, Moguls and Modern Advances in Transfusion Medicine

CSMLS / NBSMLT Congress 2005 Moncton, NB May 28-June 1
Navigating the Tides of Change

NBSMLT AGM / Symposium 2005 Moncton, NB Oct. 21,22

