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Fostering Mental Wellness in Education

THE IMPORTANCE OF A BIOSECURITY PROGRAM IN THE LAB

Innovations in Laboratory Medicine

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Continuing in Uncertainty

Christine Nielsen
CHIEF EXECUTIVE OFFICER

I've learned a lot about our medical laboratory community in the past two years. By stories we've heard, social media, emails, phone calls and messages, I've learned that through it all, you were there for patients. Th ough the unprecedented demands, the burnout and stress, you remained dedicated to your work. By doing so, you have gained more respect and raised more awareness for the integrity and vital role we have in health care. Thank you for continuing to represent the profession and your community with pride.

While you do your job, we promise to do ours. The role of CSMLS continues to be one of support and advocacy, ensuring you have the resources you need to continue doing great work, even after this pandemic.

We've continued our work on tackling the complexity of health human resource shortages. While there is no quick fix, our approach is a long-term plan that addresses the issue from several key points.

Over the past two years, I've had meaningful conversations with multiple provincial government bodies regarding the shortage of MLTs and the regulation of MLAs. Regulating MLAs would help ease the pressure from MLTs in labs, ensuring a standardized entry-level practitioner. It would be a positive move that puts patients fi st – using a validated national competency profile, national accreditation (EQual Canada) of education programs, with the CSMLS high-stakes national certifi ation exam providing an extra layer of assurance.

We also know that part of the reason we have crushing workloads, outside of COVID-19 testing, is excessive, nonvalue added laboratory testing. We continue to work closely with Choosing Wisely Canada for the large scale promotion and adoption of our Lab Wisely set of recommendations. When Lab Wisely recommendations are taken into practice, it will reduce the burden on our highly qualifi d professionals, without compromising patient outcomes.

We've been building the body of knowledge around mental wellness of medical lab professionals since 2016. We can see from the data that the pandemic is clearly taking its toll; you are paying a heavy price. To learn more, including barriers to wellness, we are launching a pilot program that will focus on a peer to peer support group. We will test the interest and viability in offering a safe, facilitated space with a mental health professional to consider issues like identity, stress, and burnout. As members continue to use our mental health resources, this would add to your support tools.

Resiliency, feelings of duty, and hard work are getting us through these challenging years, but it will be a hollow victory if we don't take care of ourselves. Mental health support is not a luxury, but a vital part of our own health care. After all, you can't pour from an empty cup. Learn what you need to fill your cup, to recharge your batteries, or whatever you need to keep well, in order to continue doing the work you love to do. J

Here for You

Lucie Alain
2022 CSMLS PRESIDENT

I am honoured to be writing my fi st message as CSMLS President. My time as Director, Quebec, was a very rewarding experience, but being elected to serve as your President is humbling. Thank you to the CSMLS Board who elected me to Vice President two years ago. To all CSMLS members, I look forward to serving you the best that I can, and I believe what we all need most right now is support.

I joined the military in 1987 and have worked very hard to become Chief Warrant Office (CWO), which is the most senior non-commissioned member rank. I have served my country for 35 years. In that time, I was deployed twice to Afghanistan and three times to the former Yugoslavia. I can honestly say that I am no stranger to change and challenges. That's why I empathize with you all, each and every day.

For the past two years, my thoughts have been with you all, the medical laboratory professionals who have been working through a seemingly endless quantity of tests. You can be assured that I continue to carry the same empathy as CSMLS President. In every action I take as President, I will be thinking of your mental health, the struggles of working understaffed, the challenge of constantly adapting to new protocols and knowledge, and the never-ending problem solving that seems to define our profession.

Having been on the Board for seven years, I've seen a lot of change in the profession, but I've also seen change in the Society. I am proud to have been part of the board team who validated the Strategic Plan in 2021. I think it is the best plan to support you, now and in the future.

As President, I am even more proud to see that plan put to work. It is a plan that focuses on creating a strong community that helps you grow, but also focuses on local advocacy to create change for the profession and support for your needs. I will focus on that support as your President. You are there for Canadians, so I will be here for you. J

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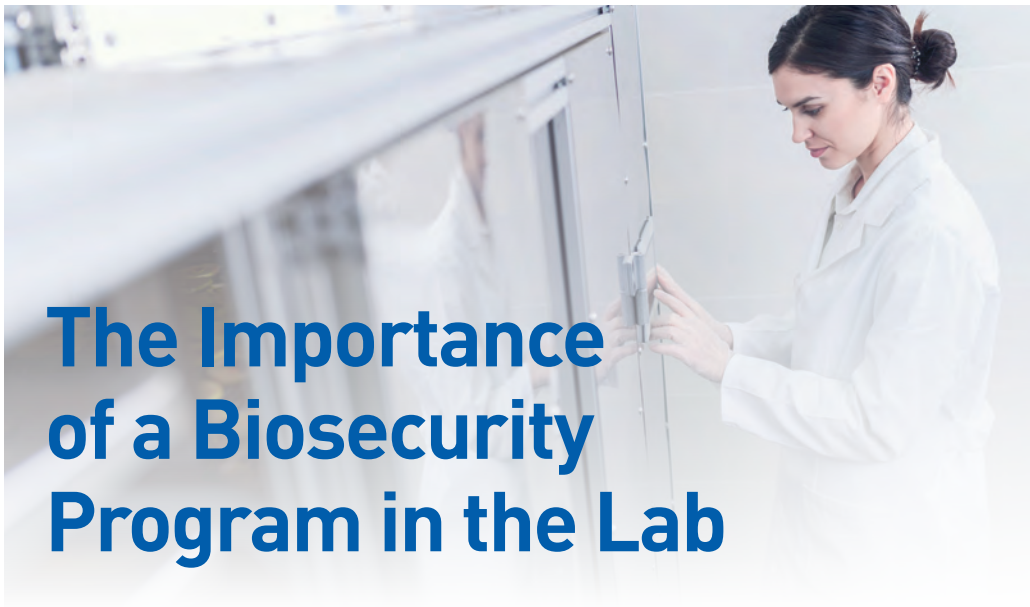

The Importance of a Biosecurity Program in the Lab

Some newsworthy biosecurity incidents have occurred in Canada in the last several years, including at federal[1] and hospital[2] facilities. Fortunately, most of us will not be involved in these types of incidents; but having a biosecurity program[3,4] in place will help prevent such an event and mitigate the effects should one occur. Establishing and implementing a biosecurity program is an important management responsibility. Preventing unauthorized access, theft, misuse and diversion are key objectives of a biosecurity program.[3,4] You can be involved in creating and maintaining a biosecurity program at your workplace to ensure that the program is effective for you and your colleagues in the lab.

To set the stage, it's important to determine if you have a formal obligation to implement a biosecurity program. The Public Health Agency of Canada requires a formal program for organizations holding a licence under the *Human Pathogens and Toxins Act* and *Human Pathogens and Toxins Regulations*, and a Canadian Biosafety Guideline[5] is publicly available. Th s requirement applies to all persons conducting controlled activities with human pathogens and toxins. Additionally, your organization may require you to have a plan as part of the Occupational Health and Safety Management System (OHSMS), or as an element of the human resource function.

Once you've determined there is a need for a program, a risk assessment must be completed as a fi st step. The risk assessment requires careful consideration of the diversity of:

- biological hazards,
- inventory complexity, and
- physical infrastructure.

You can contribute to this process and be part of the team to identify and prioritize assets including pathogens, equipment and both physical and human resources. Carefully document whether your organization has pathogens at higher risk groups (e.g., Risk Group 3/4) or specialized facilities (e.g., tuberculosis, prion or Containment Level 3/4 facilities). Some of this scoping work may tie nicely into other lab security programs, such as possession of controlled products or substances.

The next step is to defi e threats and vulnerabilities in staff and physical security; you can help in this process and assist a multi-person team to make informed judgements about these threats. "Insider" threats are those that involve current employees who may be dissatisfi d or subject to manipulation by others, while "outsider" threats can include former employees, protest groups and criminals. Each of these groups may have a special interest in the assets within your lab. They may want to cause harm to others or use equipment for illegal purposes, such as illegal drugs. Most organizations have a human resources function that provides an adequate level of reliability during hiring/termination (e.g., acquiring social insurance number, reference checks and credential

verifi ation). Increased levels of scrutiny may be warranted based on the risk assessment conducted above.

In terms of physical security, many labs are part of a larger building where there is an adequate level of physical security. You can verify this by starting inside the lab and working outwards to identify the different layers of security, such as:

- locked storage cabinets and secured equipment inside the lab
- locked laboratory doors or access control points at building fl ors/entrances
- requirement to escort visitors, restrict after-hours access
- CCTV and security staff

Once the risk assessment is completed, you must now match the risk and risk mitigation efforts for each asset and threat identifi d. Th s may be done using an existing risk matrix in your organization. Develop and implement a risk mitigation strategy for each adverse event so that the likelihood of a serious outcome is reduced. It's important to recognize that you cannot control everything so a balance must be achieved in reducing risk to an acceptable level. For example, if unauthorized access occurs and the consequences could result in self-harm or harm to others, the risk level needs to be assessed as low, medium or high, and effective controls must be implemented to prevent such occurrences.

Like any program, the biosecurity program is only as effective as its weakest link. Create a thorough understanding of the program through orientation, refresher training and by raising awareness at reasonable intervals. Th s will help ensure the biosafety program meets its purpose and prevents incidents in your lab.

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MENTAL HEALTH STUDY ASSESSMENT: BURNOUT

The Canadian Society for Medical Laboratory Science (CSMLS) published a report that examines mental health issues, including stress and burnout, as well as mental illness of medical laboratory assistants (MLAs), technologists (MLTs) and other related professionals.[1] We've used the information to help our members in a number of ways, including engaging registered psychotherapists to assess and devise methods to help resolve related mental health issues, one of which is burnout. Below, registered psychotherapist Rosina Mete outlines burnout and the signs and steps leading to this mental health issue in the workplace.

BURNOUT

One of the newest additions to the mental health toolkit examines the five-stage model of burnout[2] as designed by Winona University, and which is supported by peer researchers.[3]

Burnout is characterized by three types of symptoms:

- exhaustion
- alienation from work-related activities
- reduced performance

The path to burnout often follows a five-stage progression, marked by the optimistic beginnings of a new job or role and declining mental health over time. We pose the question: Which stage resonates with you?

Stage 1 - Honeymoon

The honeymoon stage is marked by high job satisfaction, commitment, energy, and creativity. The key issue is what patterns of coping strategies you begin to develop when facing the inevitable stresses of the job. In theory, if the patterns of coping are positive and adaptive, then you will remain in the honeymoon stage indefin tely. But few persons do.

Stage 2 - Balancing Act

As opposed to the unbridled optimism and positiveness of Stage 1, you now are clearly aware that some days are better than others, regarding how well you are handling the stress on the job. An awareness of a noticeable increase in the following is indicative of Stage 2:

- job dissatisfaction
- work ineffici cy, including avoiding making necessary decisions, "losing" stuff t work (even on your desk!), etc.
- fatigue (a general fatigue, often accompanied by deep muscle fatigue)
- sleep disturbances (often that you are so "busy" in your head that you can't get to sleep)
- escapist activities of choice (including eating, drinking, smoking, zoning out in front of the TV, etc.)

Stage 3 - Chronic Symptoms

The chronic symptoms stage is marked by an intensifi ation of some of the same indicators cited in Stage 2, and may include:

- chronic exhaustion
- physical illness (remember that stress is a risk factor in many diseases)
- anger, depression

Stage 4 - Crisis

During the crisis stage, the symptoms become critical and may include the following:

- physical symptoms intensify and/or increase in number
- obsessing about work frustrations
- pessimism and self-doubt dominate thinking
- you develop an "escapist mentality" (habits that separate yourself from your life and delay facing issues, such as increased alcohol and drug use, increased phone scrolling, increased shopping habits, etc.)

Stage 5 - Enmeshment

During the enmeshment stage, the symptoms of burnout are so embedded in a person's life that they are more likely to be labeled as having some signifi ant physical or emotional problem rather than being referred to as a burnout case.

LEARN MORE

Over half of Canadians report their mental health has worsened since the onset of the pandemic with an increase in anxiety symptoms. You are not alone! CSMLS has curated relevant resources for you.[5]

The CSMLS Mental Health Toolkit has medical laboratory-specific esources for managers, individuals, students and educators. Go to **mentalhealth.csmls.org**.

Find a collection of mental health resources from trusted sources on our Useful Links webpage. Find them at **csmls.org > Research > Grants and Resources > Useful Links**.

CONTINUING THE DISCUSSION

CSMLS, along with our allied professions, Canadian Network of Agencies of Regulation (CNAR) and the Canadian Association of Allied Health Programs (CAAHP), have continued the dialogue regarding mental health at several virtual symposia, including CSMLS Insights Speaker Series virtual events. We have also issued a joint statement highlighting our synergy and understanding to this cause.[4]

Our next steps will include collecting additional, and more focused, information from within our organizations. We aim to further our understanding and continue to help our members resolve mental health issues, including stress and burnout.

CSMLS will pilot a brief program in 2022 to assess the interest and viability in offering a safe, facilitated space with a mental health professional to consider issues like identity, stress, burnout and resources available. Subscribe to eNEWS, our biweekly electronic newsletter, to receive updates on this pilot as they become available. J

BRANDON DJUKIC, BSc, PhD
Researcher, CSMLS

ROSINA METE, MSc, PhD, RP

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CHAMPIONING THE PROFESSION

The Indigo Lab Coat, the campaign that created a new symbol of the medical laboratory profession, continued its mission to raise awareness of your work and the profession as a whole.

This year, we partnered with a new, honorary, member of the CSMLS community for another national campaign featuring the Indigo Lab Coat: Dr. Hayley Wickenheiser. While Dr. Wickenheiser is known for her leadership on the ice as a five-time Olympian with Canada's Olympic hockey team and her role in the Toronto Maple Leafs organization, outside of her hockey career, she recently started her residency as a medical doctor.

Dr. Wickenheiser's experience in health care gave her an inside perspective on your role in patient care, so we had her share personal refl ctions on the medical laboratory profession. Th s personal refl ction became the campaign twist: Instead of the 1.2 million medical tests you perform everyday being microprinted on the lab coat, it was covered with Dr. Wickenheiser's praise for you, medical laboratory professionals across Canada. Th s new coat, dubbed the Indigo Lab Coat of Honour, provided a pandemic perspective on the campaign, highlighting medical laboratory professionals as the "unsung heroes" of the last few years.

Photo courtesy the Canadian Medical Hall of Fame

Dr. Wickenheiser's words inspired a new web video that blended the lab coat and her hockey heritage by showing the coat lifted to the rafters, symbolizing the highest honour in sports. The video was shared across CSMLS social media channels, and ran as a paid promotion on YouTube. All together, the social media campaign was viewed more than 400,000 times.

The hockey theme was carried over to the bus shelter ads, with ten ads strategically placed in high-visibility areas and in regions surrounding hospitals in five major cities. The eye-catching indigo lab coat image used a quote from Dr. Wickenheiser to educate the public on the importance of medical laboratory professionals. The ads directed the public to visit our website to learn more about the profession. These advertisements are estimated to have been viewed 6.9 million times.

Perhaps the biggest change to this year's campaign was a brand-new element to raise public awareness: a live display of the Indigo Lab Coat of Honour. The display featured the coat hung within a clear case, along with information about the story of the microprint design, the work done in the lab and how Dr. Wickenheiser honoured the profession. For just over two weeks, the Indigo Lab Coat was fi st on display at the Canadian Medical Hall of Fame in London, Ontario, and then placed in the Vaughan Mills Shopping Centre in Vaughan, Ontario, at the height of the holiday shopping season.

The CSMLS would like to thank Dr. Wickenheiser for advocating for the medical laboratory profession. The pride that she shared generated greater awareness about medical laboratory professionals and your impact within the Canadian health care system, especially during the pandemic.

Visit IndigoLabCoat.ca to see the new video honouring medical laboratory professionals and your incredible work.

CATHY BOUWERS
Communications Manager,
CSMLS

MLAs:

Understanding the Workforce and the Importance of Retention

My love of the laboratory stems from fond childhood memories with my mother, a dedicated food scientist with Agriculture and Agrifood Canada for 35 years. She brought me to work on occasion, in the fi ld and in the laboratory, and it was love at fi st sight!

Flash forward to 2008, when I got a job as an MLA. My passion grew like the Grinch's heart! I worked at this position for eight wonderful years with an all-star team of MLAs, MLTs, students, doctors and administrative staff. Those years gave me great insight on both professional and personal growth. I can look back at the big picture and appreciate how things worked, and sometimes, did not. Now I can pass on my insights to you, specifi ally how to make the best use of the valuable MLAs on your team and the importance of staff etention.

Make the Most of MLAs' Skills

The pandemic has stretched laboratory staff to a breaking point. This has greatly affected the workforce. We are seeing an augmentation of stress leaves, burnout, depression and even some valuable members permanently leaving the profession.

MLAs can't single handedly solve these issues, but they can help. The vast majority of MLAs work in phlebotomy, specimen reception and specimen accessioning, but we can do so much more. I believe we can find tasks in all areas of the laboratory that MLAs can take on to help lighten the load on MLTs. There are pre-analytical tasks, basic maintenances, cleaning and sorting to be done in most departments. Look at each part of the process to see where an MLA could be helpful.

Scheduling can be tricky, but strategically thinking of when and how MLAs are working can help. Sometimes, scattering the MLA shifts, to have them start at different times, can immensely help workflow. By pinpointing times where there is an influx of work for MLAs, you can choose to make changes in shift start times to accommodate these.

MLAs work under a range of MLT supervision. Sometimes, this supervision is minimal, but still exists. Look at ways MLAs can be

productive, even under minimal supervision, so that their work can positively influence the workflow. If MLAs can get most of the pre-analytical work done, MLTs can then concentrate on work that only they have the knowledge to do. As a gentle reminder: We must respect the scope of practice.

Why Retention is Important

The more you see, the more you know - that is experience. Working in a hospital laboratory, I can tell you that you rarely see anything just once. After all those years, I could almost predict problems. I also became an expert in reading manual requisition forms and knew what to do in difficul situations. This was possible because of my time spent learning.

Experience also meant that I knew and understood every step of the process in each specimen that we received, which is key for trouble shooting. I knew how things worked at the doctors' offices clinics, the ER and the hospital floors. Some specimens are easy to re-collect, others impossible or next-to impossible. Those were the ones where I had to make sure we did everything we could to solve any issues. These skills and knowledge only come with experience over time.

Better Peer Training

MLAs usually learn the ropes from other MLAs. Peer-to-peer training is what can set the tone for how things will go in the future. Not everyone excels in training. It is crucial to identify the MLA that has the experience, but also the skill set to train new hires. The best peer-to-peer training is often offered by an MLA who is comfortable in the position and who has the desire to train someone that will be great to work with. These people make the training fun and informative. They usually have many anecdotes about the job and the staff they work with.

For any new employee bombarded with information, details and pressure to perform, having someone nearby who has been there, is encouraging, and understands the struggles you're facing – and has been working for five to ten years – gives you hope that you can get there too.

Strengthening the Team

Who likes repeating themselves? When you experience too much turnaround in your staff, everyone feels like they are constantly repeating the same thing, but to different people

I always tried to look at my lab department as a sports team. We all worked together for a common goal and did it in a very organized way. Doing so, we never overlooked the fact that everyone has strengths and weaknesses and everyone has a life outside of work. As a team, you recognize that, and you embrace it. Knowing that I could ask for help with work if I needed to leave early or swap a shift was comforting. By being attentive to everybody's different needs, and by listening, I could excel at my job. You usually do not get this type of relationship when your MLA position turns around every month.

The longer you work with someone, the better you get to know them and how they work. After eight years, I knew who wanted help setting up for specific specimens and who instinctively needed to get things ready on their own. Both were excellent MLTs and by getting to know them, I knew what to do for us to get the most work done. Thos years also gave me a chance to get to know my coworkers personally.

Time to Grow

If you retain your MLAs long enough, they will learn how to apply many soft, or learned, skills, such as organization or time management, in the laboratory. For example, my workplace efficien improved over time. Time management skills helped me be more productive and work more independently. Once this was mastered, my confidence just grew. I was confident in my work and my position as a valuable team member.

Which leads to my final note, really a message to my fellow MLAs. Retention affects confidence in such a big way. The better you get at your position, the more confident you become, and that takes time. I tried to remind new hires that you must learn how to do something well first, then when you feel confident doing it, that same thing will become a skill. Keep mastering as many skills as you can, keep challenging yourself and you will love your job as it will be fulfilling interesting and the years will fly by. J

LEARN MORE

Visit **csmls.org/learning** to watch Goguen's full webinar, available on demand in the Learning Centre, and for more insights to MLAs and the value of employee retention.

CHRISTINE GOGUEN, MLA

FOSTERING MENTAL WELLNESS IN EDUCATION

As COVID continued to pick up speed in the spring of 2020, the Bachelor of Science in Medical Laboratory Science (BSc in MLS) program at the University of Alberta was preparing for accreditation and the implementation of a new curriculum map. These were some of the larger scale stressors for the program, its staff and students. With changes due to COVID occurring rapidly, the program had to be ready to pivot and respond quickly. The disruptions affected many factors in the program, and the program worked to keep the atmosphere, whether in online classes or physically distanced laboratory sessions, as positive and inclusive as possible.

When I sat down with my program director to reflec on positive mental health initiatives through this period of change, we realized how much had happened in the last 20-plus months. There have been many hurdles; and yet there were key markers of resiliency and quite simply, positive outcomes for both students' and instructors' mental wellness. Looking back, we can see the benefit of new initiatives that we can move forward on knowing that we have come far and will continue to reach forward.

We did and continue to see issues with student engagement in the online environment, so we introduced activities to improve engagement:

- Show and tell sessions (i.e., favourite coffee cup or food) helped set a fun and positive tone. The most popular was the show and tell of participants' pets, which became a part of class sessions on a more regular basis.
- Another way we approached engaging with the students was to offer online game platforms such as Kahoot. The students were able to test their knowledge and participate in the class.
- We also encouraged students to turn on their cameras and ask or reply to questions via microphone or chat.
- At the end of some lectures, we would ask the students, if they were comfortable and had a camera, to turn on their cameras and give a wave to everyone before they left the class. A good number of the students chose to turn on their cameras.

In the clinical year, practicums were disrupted due to COVID, and several groups had to isolate, including one group who was delayed ten weeks. Despite this, the students and instructors kept lines of communication open, and the students were all able to complete the missed rotation time and their clinical year. To coordinate this required nimbleness, adaptability and resilience. A few key initiatives were a large part of this success:

- The University of Alberta provided information resources for both students and staff during the pandemic with opportunities to attend online sessions on topics such as resiliency, self-care and management of time and energy.
- Communiques were provided weekly to the university community and more often as more changes occurred. Staff were also able to attend sessions focused on teaching and learning, with webinettes offered by the Centre for Teaching and Learning (CTL) covering such topics as Zoom basics, enhancing a Zoom lecture and student engagement to name a few.
- MLS students continued to have access to their MLS mentors, who offered virtual coffee meetings.
- Students were encouraged to attend townhalls, which offered them the opportunity to come together with their instructors to ask questions, gather as an online group, share stories, and to hopefully decompress, even a little.

We also started initiatives to help the students and staff with their overall wellness, where group meetings and activities were valuable opportunities to socialize, problem-solve and just have some fun.

- MLS staff came together weekly during the first part of the pandemic to discuss everything from issues and possible solutions, to what was new and who was taking on a new COVID project like baking or knitting. This provided the opportunity to engage, discuss, problem-solve and even decompress.
- The Medical Laboratory Students' Association (MLSA) offered wellness sessions such as Zoom parties and online movie nights, along with COVID appropriate treat bags.
- Our MLS director offered self-care sessions for the students. Linked to self-care is self compassion. The foundations of self compassion are self kindness and care, accepting that we share a common humanity (and being imperfect is part of the package) and using mindfulness to work through tough and trying times.

Being kind to ourselves might be one of the hardest things to do on a continuous basis, and the stress of the pandemic has tested self compassion for many. Mindfulness suggests that the past is a memory and the focus should be on the present. MLS will continue to provide support and caring for students and staff as the pandemic lingers on.

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What is Non-Conformance Management?

The laboratory's quality management system (QMS) is the bedrock in meeting quality objectives. The QMS governs all laboratory activities and addresses all processes to ensure accurate and timely service delivery to patients. One fundamental element of a QMS is a process to manage non-conformances. The goal is to cultivate an environment in which occurrences can be detected, reported, and the outcomes used to improve the quality of laboratory services.

A non-conformance, in its simplest terms, is a failure to meet requirements. It occurs when there is a detour (unintentional or deliberate) from established practice, policies, and procedures, resulting in a product or service that does not meet defi ed expectations. In the laboratory, examples include:

- Unlabeled/mislabeled specimen
- Missing specimen
- Specimen preparation error
- Equipment out of specifi ation
- Delay in turnaround times
- Incorrect delivery of critical report

A non-conformance can be minor (adherence to policy/process or procedures is inconsistent or the requirement is met in practice, but

required documentation is missing or incomplete) or major (has the potential to directly impact patient safety or an examination), but each can impact product quality or patient safety.

By managing non-conformances, we can learn about laboratory errors from the most critical to the mundane and improve quality from the ground up. In my experience, the best way to approach managing non-conformances is through the "five W's" of effective non-conformance reporting.

1: Why Report?

It is a requirement by standards and accreditation bodies to have a system for detection and reporting of non-conformance. For example, IQMH Accreditation Standard Section IIA.2 states "The quality management system shall encompass all management activities and processes relating to quality assurance: (h) investigation of non-conformities." It is also a proven method of continuous quality improvement (CQI) by which error waste and ineffici cies are reduced and quality and safety principles are implemented and sustained. So, a robust but effici t reporting process must be built into every laboratory system to guard against underreporting or errors.

2: Who Should Report?

Ideally, the person who detected the non-conformance should report the occurrence as close to the time of the event as possible. Th s individual has the closest perspective to the details that led up to the event, the event itself and any immediate actions needed to contain the issue. However, the review and investigation stage on non-conformance management must be open to various stakeholders to ensure a wide range of perspectives can be part of the resolution.

3: When to Report?

In non-conformance reporting, the clock is ticking. Critical and major non-conformances must be reported within 24 hours of detection. The longer it takes to report the error, the more potential there is to: allow subsequent errors to occur; lose essential information concerning the event; and have staff unavailable to recall the details of the event.

However, non-conformances may be identifi d during internal audits of the management system and laboratory activities, management review, document reviews, customer or supplier audits, or external assessments by regulatory or accreditation bodies.

4: What to Report?

Ultimately, the biggest challenge for laboratory staff is what is considered reportable. For minor non-conformances, a simple track and trend of such events is enough to raise a flag if recurrence is noted above a threshold. The process should use a standardized, systematic approach to help identify and assess potential risk or failure that exists in a process, and to identify which errors need be reported. Looking at each error with the lens of its potential impact on the product or service if the error went undetected is helpful in determining said risk.

Once a non-conformance is deemed reportable, the documentation must capture specific details such as date, time, area, involved staff and a brief summary of the non-conformance. Any non-conformance should be suffici tly documented to ensure there is traceability of all steps and actions taken and signatures of those involved in the capture, review and approval of the report.

5: Where Next? A Risk-Based Approach

Using a risk matrix to assign a risk rating is an effective tool, as it allows staff to adopt a proactive approach to non-conformance reporting and enables the identifi ation of potential non-conformities. Additionally, this prepares staff to react objectively when faced with the question "to report or not report?" and empowers staff o implement corrective actions.

After the 5 W's

There is a well known quote that the definition of insanity is to repeat the same mistakes and expect different results. A lack of effective non-conformance management in your quality system may feel the same. Reporting is essential, but without timely follow up, investigation and process change to ensure effective outcomes will be futile, if actions to correct the error at its core are not performed. Change outcomes must be linked with learning to avoid the same pitfalls in the future. Follow these key guidelines to ensure effective outcomes after the 5 W's.

If the non-conformance is major, perform a detailed investigation and root cause analysis. Involve a number of subject matter experts, including the supervisor and the quality and medical director, to determine the source of the non-conformance and make recommendations to mitigate further opportunity for recurrence. The investigation may involve a physical walk through the steps in a process, to follow the "breadcrumb trail" and find the reason for the non-conformance.

Management should review major non-conformances, and ensure the medical/scientific director has had the opportunity to view reports at a monthly quality meeting and the annual report. Minor non-conformances should also be available for review if required.

When implementing preventative change, there will be documentation in the non-conformance report that speaks to the actions (short and long term) needed to guard against further incidences of the same or similar non-conformance. Remember to follow the change control process to ensure modifi ations to policies, processes and procedures are done in a controlled manner.

Typically, it is the role of the quality manager to assign a tracking number to the non-conformance and file in the QMS, as well as an individual for follow up with the department issuing the non-conformance. Their follow up will be a guide as to whether the fix is working. If there are still problems, then a new corrective action plan is required and the non-conformance must remain open for further investigation.

Finally, it is best to present individual and cumulative data on the type, origin, and severity of corrective actions taken at local quality assurance meetings, so that trend analysis can highlight any ongoing concerns. Reports and summaries should also be shared with appropriate staff to ensure knowledge and ensure full transparency.

In our busy and resource strained laboratories, quality and accreditation will always require non-conformance reporting systems. As laboratory teams, we have an obligation to ensure that errors are easily reported and not missed or under reported. It is vital that we all understand the rationale for safe and effective non-conformance handling. Teams should benefit from a review of the five key principles (why, who, when, what and where next) of non-conformance reporting.

Using a risk-based approach and continuous quality improvement goals, together with standardized methods, will ultimately help focus our attention on the advantages of maintaining a user-friendly non-conformance reporting and management system. J

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INNOVATIONS in Laboratory Medicine

There is no argument that in the current era of medical laboratory consolidation and staff shortages, hospitals and various health care facilities are eager to implement innovations that can help stem the adverse impact of human resource shortages in laboratory medicine.[1] But medical laboratory professionals have found ways to solve specific issues that in turn increase efficienc and decrease some workloads. From findin a hidden supply of a precious resource through increased efficiencie to applying modern technology to a large-scale issue and stemming unnecessary test orders at the source, laboratory professionals have been at the forefront of laboratory innovation that benefits health care providers and patients alike. Many unique initiatives have now been implemented to fin savings, both in time and cost, in laboratory medicine. CJMLS highlights three specific instances where laboratory professionals create efficiencie and continue to improve the laboratory landscape, one innovation at a time.


Dr. Calvino Cheng

Saving Blood Product in Nova Scotia

Dr. Calvino Cheng, a staff hematopathologist at Queen Elizabeth II Health Sciences Centre (QEII), the centre's former Blood Transfusion Director and current Director of Pathology Informatics, and Professor in the Department of Pathology at Dalhousie University in Halifax, Nova Scotia, has developed an algorithm in conjunction with his colleague Dr. Jason Quinn, the Blood Transfusion Director at Queen Elizabeth II Health Sciences Centre. They were motivated to look at a strategy to minimize expired red blood cell units in the hospital's blood bank and improve the efficienc of the red cell inventory ordering process.

"We noticed that the ordering of red cell units for inventory was quite a manual process," said Dr. Cheng, noting the QEII transfuses about 14,000 to 15,000 red blood cell units annually. "It depended on what was happening that day. We needed a way of ordering so that we would not over order or under order. We need to order enough blood to have on site, so that we do not have shortages. You can't over order because you can't return the blood (that is not used)."

One of the summer students working with Dr. Cheng helped develop an algorithm using data over a six-year period (from 2009 to 2015) on all transfused inpatients. One of the vital inputs into the algorithm, with respect to predicting likelihood of transfusion, is the measure of hemoglobin values linked to their respective ABO blood groups.

"We integrated that information into an algorithm to help us order red cell inventory based on what we had in inventory and what would happen in the next 48 hours in terms of transfusion," said Dr. Cheng.

The automated algorithm calculates the number of red blood cell units to be ordered from Canadian Blood Services based on both retrospective daily use and prospectively based on hemoglobin values on all patients in the hospital system.

Once the algorithm was implemented, there was an overall reduction in monthly outdate rate, with rates decreasing from 19.1 units to 8.1 units (or 1.79% vs. 0.72%). There was also no increase in the number of stat orders to the hospital's blood supplier in the post-implementation period.

Before the use of the algorithm and automated ordering, Dr. Cheng said personnel would estimate the number of units of blood that needed to be ordered based on looking at printouts, what was happening clinically that day, looking in various fridges, and subtracting that from a manually established target on paper. Ordering was variable and operator dependent, whereas now it is a function that is very precise. "We have reduced this down to a printout that tells you that you need six units of this [blood group], two units of this, and three units of this," said Dr. Cheng. "It is all very mathematical."

Another advantage of the use of the algorithm is that it saves on resources to manage the inventory. "We do not really spend time managing the inventory," explained Dr. Quinn. "For a lot of labs, managing inventory is done manually. They are literally counting their inventory and looking at surgeries that are coming up and deciding to order a certain amount." Now that the algorithm is part of the lab's routine, time, and precious blood bags, are saved.

Morley Bridge over the Bow River, within the Stoney Nakoda Nation in Alberta.

Bridging a Physical Gap for Patient Care in Alberta

It was at a medical conference in late 2019 when Wade Hawkins, principal investigator at the Southern Alberta Institute for Technology's Centre for Innovation and Research in Unmanned Systems, had an informal chat with infectious diseases physician Dr. John Conly, a professor in the Cumming School of Medicine at the University of Calgary in Calgary, Alberta, about the concept of using drones to deliver medical supplies to remote First Nations communities.

"We discussed several health care applications, such as vaccine delivery and the delivery of medical devices to remote communities," recalls Hawkins.

Once the COVID-19 pandemic hit, it fast tracked discussions into proof of concept. Hawkins and others decided to study the viability of sending COVID-19 test kits on a drone mission, noting

Wade Hawkins

this would avoid unnecessary travel and decrease the threat of COVID-19 infection for residents of remote communities in Alberta.

"Residents do not want to go to a lab to potentially infect other people if they have COVID or get infected if they do not have it," said Hawkins.

A sample COVID-19 test kit was delivered via drone to Morley, a community within the Stoney Nakoda Nation in Alberta, returned to the lab, and then analyzed against a control sample, to determine if the test kit degraded during drone transport. Hawkins and collaborators observed that there was no degradation of the sample that travelled via the drone.

"That was a big deal," he said. "The result told us that we could fly [COVID] test kits to the community, fly them back, and that there was not any degradation throughout the mission."

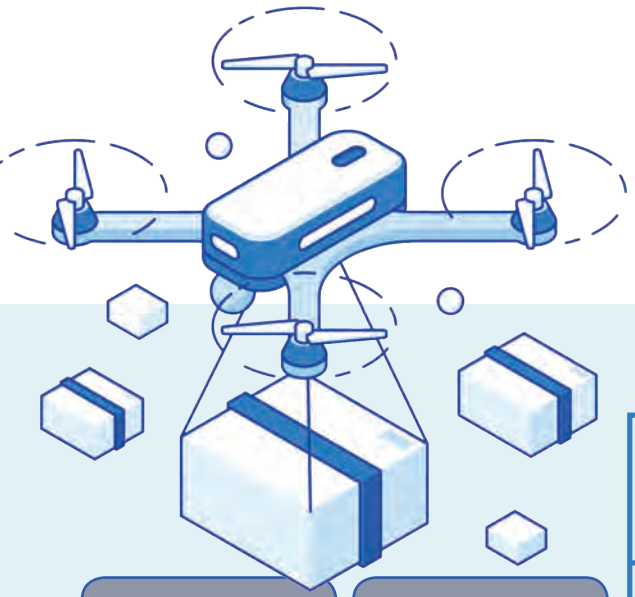
Moving forward, Hawkins and his collaborators are trying to determine the best use case for the drones. They have been testing medical delivery scenarios in terms of drone endurance, payload configurations, and delivery methods such as fixed-payload and winch-based payload drop delivery systems.

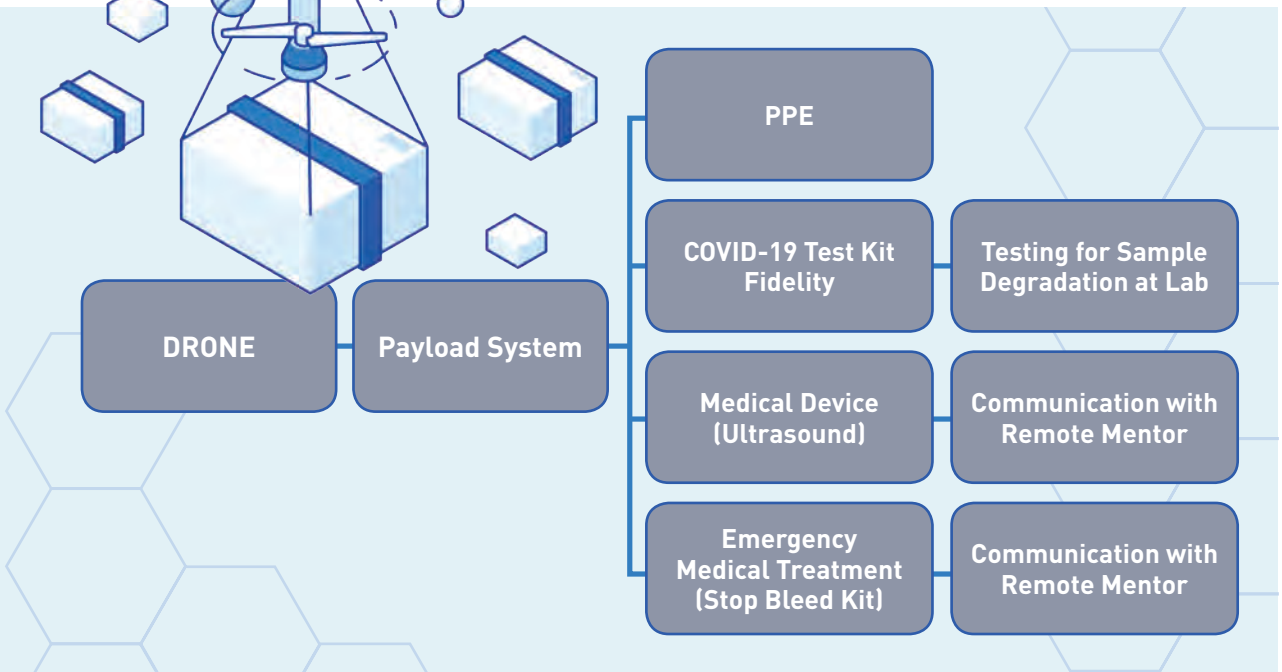
"We want to demonstrate that the delivery of medical supplies and devices can be completed through either payload system across all four seasons in Canada and in various environmental conditions," said Hawkins.

In the future, blood work and organs could also be transported by drones, predicts Hawkins. "The goal is to develop standard operational procedures that allow drone operators to complete safe and successful delivery."

Other items that can potentially be transported via the drones is insulin and other medication for members of remote Indigenous communities who are unable to travel in inclement weather conditions, pointed out Hawkins.

While Hawkins and his team continue to develop the technology's best use, the COVID-19 test kit trial may have opened doors to better patient care despite distance, terrain and the Rockies' harsh weather.





Ensuring Judicious Orders of Complete Blood Counts

Many interventions that aim to modify the ordering of complete blood count (CBC) with white blood cell (WBC) differentia have focused on changing physician ordering practices, but clinicians at Vancouver General Hospital opted to make technologists who input the orders empowered to make the change.

"We came at it from a different perspective," said Kristine Roland MD, FRCPC, Clinical Associate Professor, University of British Columbia and hematopathologist at Vancouver General Hospital in Vancouver, who noted she and colleagues were inspired by the Choosing Wisely Canada Campaign, the national voice for reducing unnecessary tests and treatments in health care. "We realized that we could program rules in the middleware, regardless of what had been ordered, to optimize whether or not we need to proceed with a WBC differential.

Dr. Roland and colleagues noticed in reviewing blood work orders that clinicians who ordered a CBC with WBC differential tended to place more than one such order daily. "We were not entirely convinced that they always needed the white cell differential, that perhaps they were just ordering the CBC with [WBC] differential out of habit because that is what they normally do," said Dr. Roland, noting that CBC with WBC differentia is the first option in the order entry form. "We postulated that they probably weren't wanting to recheck the [WBC] differential. One of the highest group of users were in the ICU."

Dr. Roland and colleagues firs consulted with the hospital's head of ICU and confirmed that multiple CBC orders were not placed to obtain more than one WBC differential daily. They then developed an algorithm to cancel any repeat WBC differential orders in a day, confining the algorithm in the middleware first to the ICU in 2019, where in the initial implementation there were "hiccups" in human error. Once the algorithm became bulletproof, Dr. Roland and colleagues broadened the use of the algorithm to the hospital at large in 2020.


Dr. Kristine Roland

"We would run the CBC but cancel a repeat differential and append with a comment saying 'Please see previous differential'," explained Dr. Roland

The algorithm led to a monthly WBC differential cancellation rate of 5.40% for a total of 10,195 canceled WBC differentials during the cumulative post-implementation period (September 25, 2019, to December 31, 2020).

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Almost all (99.94%) WBC differentials remained cancelled. The cancellations resulted in savings of CAD$0.99 per cancelled differential. "It also resulted in about 100 fewer slides per month, which represents about 17 hours of tech time," said Dr. Roland, adding that there was also a reagent savings of roughly $350 monthly. "We had an extremely high acceptance rate from physicians, and the door was open to resurrect the [WBC] differential if a physician ever wanted to. It rarely happened and now rarely happens."

Those 17 hours per month that are saved as a result of the middleware algorithm means a technologist could dedicate his or her time to other duties in the lab, noted Dr. Roland.

A future plan is to exploit the sophistication of the middleware with respect to work up of pleural fluid or cerebrospinal fluid, according to Dr. Roland.

Whether it is minimizing expired blood product at a hospital blood bank, using cutting-edge technology like drones to transport COVID-19 test kits, or developing computer algorithms to avoid unnecessary orders of lab work, these innovations in laboratory medicine are inspiring. The stories illustrate the ingenuity and creativity that laboratory professionals can offer in challenging times in health care. They show that change in laboratory resource utilization can come from within, but remind us that teamwork, good communication and dedication are required for success. Together with laboratory innovation and patient care expertise, medical laboratory professionals can be the change needed to improve resource utilization and more.

LOUISE GAGNON
Special to the CJMLS

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[1] Lab Wisely. "Success Stories." Accessed via https://labwisely.ca/success-stories/

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Talal Badawi
Ben Bagui
Terry Baird
Nisha Balan
Sanjeev Baldev
Marissa Baligod
Portia Ball
Jessica Barker-Noland
Reygel Barlam
Meagan Barlow
Elida Bato
Brook Baxter
Brianna Beauchamp
Kathryn Bell
Alexandra Benedeczky
Christine Binns
Ruxandra Blahoianu
Leslie Blake
Kayla Blanchard
Victoria Bland
Bea Therese Patricia Boado
Clodie Boudreau
Sarah Boutilier
Emily Brant
Natalie Breau
Catherine Brendle
Meagan Bromley
Emma Brown
Natalia Builes
Jessica Buteau
Lauren Buzzi
Gracie Byram
Nina Cabanaw
Katelyn Caie
Meaghan Campbell
Sarah Canadien
Fil Aldrin Noel Carbonel
Johnna Mae Carillo
Morgan Carr
Savannah Carson
Sarah Carter
Su Bin Cha
Melanie Chagnon
Nimra Chaudhary
Pushpendrasingh Chauhan
Anbereen Chawdhry
Naomi Check
Tinofadzwa Chiome
Ashley Chisholm
Annie Chuong
Josie Clarke
Olivia Clouthier
Shakara Coates
Nicole Collins
Ariel Jr. Constantino
Keesha Cooper
Amy Creaser
Kalei Crowell
Megan Cullihall
Angela Cummings
Caroline Dagher
Ly Dao
Jessica Davies
Dexter De Leon
Kaelyn Deblois
Dylan Dedora
Maria Karla Del Mundo
Andra DeMaere
Noemi Divino
Alyssa Doerr
Rosene Donaldo
Adrienne Donkers
Madison Dow
Gel Dumalanta
Rachel Dunn
Abelene Durand
Mona El Wanni
Rima Eskandar
Atefeh Esmailnejad
Chukwuma Ezeike
Ndidika Ezurike
Sayeda Falgune
Jessica Fall
Christina Fanning
Melissa Fanti-Cocco
Mizelle Dawn Farinas
Adebimpe Fasanya
Yolandi Ferreira
Nicole Flavell
Britney Florin
Suzanna Foote
Bernadette Fruelda

Antonette Joy Gabales
Aaren Gagnon
Bryanna Gallant
Mackenzie Gallant
Swatiben Gandhi
Xingxi Gao
Manuel Garcia
Anne Daniel Garcia
Brianna Garside
Aayusha Gautam
Akiko Gauthier
Patricia Gauvin
Carol Gignac
Haley Gladstone
Frances Elaine Gohing
Amber Gray-Willaims
Destiny Green
Caitlin Griffith
Sakshi Gupta
Katelin Gurniak
Mikayla Haapala
Cortney Haird
Fayez Hamam
Ahnaf Hamid
Fiona Hammond
Hussam Eddin Hanifa
Hilary Hardwick
Katie Harris
Suzan Hassanein
Anna Haverstock
Korina Hawkins
Hayley Head
Haley Hernon
Kassandra Hibbs
Stephanie Hill
Bonnie Hineman
Jennifer Hippenstall
Jessica Hoppins
Mikeala Howell
Katalin Hronyecz
Faith Hunt
Kalie Hussey
Paswa Ismael
Morgan Jackman
Jinwon Jang
Vanessa Jaramillo
Karyz Mae Javier
Raslyn Jean
Augie Joaquin
Kristen Johansen
Kaushal Joshi
John Joyson
Nyasha Katedza
Jiwanjot Kaur
Gurpreet Kaur
Jaipreet Kaur
Eliza Kazi
Alicia Keddy
Megan Kelly
Abiola Kinyosoye
Sylvia Kirwan
Corey Koerber
Bobbi-Jo Kostyniuk
Chey Kranjec
Shichha Kunwar
John Israel Laceste
Lenzie Laceste
Katrina Landry
Abagail Langille
Tracy LaPointe
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Joshua Lashendock
Lyn Sheen Layugan
Tabhata Lazzara
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Sojung Lee
Yaniv Leichtmann
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Mackenzie Leier
Karine Levesque
Youn Levesque
Nhiequel Lingat
Andreah Link
Jakki Lopez
Rachel Lupkoski
Lori Ann Lyall
Michael Lynch
Emily MacDougall
Madellen Maclean
Winmae Magbanua
Nevaeh Magnuson
Atharv Mahajan
Harmandeep Maheru
Ashima Mahey
Yvette Manful
Larissa Marshall
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Janie Michaud
Richard Miller
Destiny Miller
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Jesha Ruth Paulle Muli
Piraveen Murali
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Jessie Poitras
Stephanie-Ruth Pritchard
Sabeen Rafi
Mackenzie Ramm
Brooklynn Rauser
Julia Restituto
Danielle Reyes
Ervin Reyes
Rushelle Richmond
Kayla Robichaud
Gregory Hiram Rosales
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Andy Rousseau
Sarah Rowell
Purnima Saha
Kamalpreet Saini
Jasnoor Sandhu
Jasmine Sandhu
April Rose Sapalo
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Janine Sarmiento
Erin Saulnier
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Racquel Serquina
Christiana Shobo
Kaitlyn Shreenan
Misty Shropshire
Leah Sills
Mélanie Sirois
Brittany Smok-Mercier
Susanna Snow
Leah Snyder
Mehnaz Sohail
Danica Soltek
Elizabeth Somerville
Danielle Somwaru
Cecilia Sousa
Kasmira St. Louis
Cara Stanford
Nicole Steil
Aires Suazo
Yewande Suberu
Angie Suitters
Renita Sukhu
Yvette Ciara Suniga
Rajini Sureshkumar
Ajitha Suryadevara
Rashida Tariq
Sarah Taylor
Jaspreet Thandi
Deepak Thapa
Colleen Tremblay
Kevin Trinh
Michelle Trzok
Zoe Tuckey
Alina Turner
Rizza Mae Ann Uniana
Amanda Urbshott
Danielle Valenzuela
Victoria Van Erp
Dylan Van Gaalen
Kara Van Soest
Mae VanderKamp
Iran Vashghani Farahani
Maryamsadat Vaziriyeganeh
Linsay Kimberly Velasco
Mohan Velpula
Charisse Villanueva
Jon Bon Joeberth Villaruel
Linh Thao Vo
Kasheka Wallace-Hall
Teagan Walters
Kathryn Warnica
Sara Watson
Randi Webb
Sarah Wells
Madison Welsh
Josee Wentzell
Dezirae Whitehead
Samantha Whitney
Lauren Wilson
Kelsa Winsor
Noreene Wolf
Brooke Wolfe
Helen Wong
Ashley Wood
Jinha Yang
Alexander Yeo
Nyamer Yoh
Nada Youssef
Jin Min (Minna) Yun
Warda Zia

MEMBER SPOTLIGHT:

MEAGAN GRAFF

Opportunities to advocate for the profession can come in many shapes, and 12-year CSMLS member Meagan Graff learned just that. Meagan, a Northern Alberta Institute of Technology instructor from St. Albert, Alberta, reached out to us for promotional and educational items for an upcoming school event, where she would introduce, and potentially entice, local youth to the profession. Following the event, we caught up with Meagan to learn more about her experience and what she learned from it all.

What was the educational event you were invited to about? How did that opportunity come to be?

My sister-in-law is a junior high school teacher and was helping to organize a career day at her school for grades 7 to 9. She invited me to be a panelist, where I was able to spend ten minutes with groups of about four to six students at a time and share a bit about the different laboratory professions.

I showed each of the groups a short PowerPoint presentation that highlighted the various disciplines of laboratory medicine and the important work that laboratory professionals do each and every day. I talked to the students to fi d out what the students might already know about the lab or tie in things to what they were learning in school. Many of them shared stories about experiences they or their friends or family had with the health care system, and I was able to tie those stories back to one of the lab disciplines. It was a great opportunity to connect their knowledge with something new to them – the lab!

How do you think speaking to students about the profession helped raise awareness of medical laboratory professionals' work and value in healthcare?

There are so many fascinating careers and opportunities in the fi ld of medical laboratory science, but they may not be as well known as some of the other more common health professions. The youth I interacted with were very keen to learn about laboratory science, and they could already draw parallels to concepts they had learned about in their science classes, such as different blood cell types, or the ABO blood group system. Many of them were also aware that the lab has played a really important role in COVID-19 testing, so it was easier to talk with them about the importance of laboratory professionals as a part of the healthcare team.

What did you take away from this event? Was there a specific moment or in eraction that stood out to you?

I was really impressed with the knowledge many of the students had about clinical conditions like diabetes, even those in the earlier grades. It made it easier to interact with them as many were willing to share their own stories. A moment that stands out is when one student told me a blood bank joke! I didn't know it was going to be a joke at fi st, but then caught on as the story unfolded. I had quite a good laugh afterwards.

Would you consider yourself a "Labvocate"? Did your experience at the career day change your opinion on that in any way?

I would have considered myself a "Labvocate" before this event, but this was my fi st time speaking with younger students about the laboratory profession. I have done events such as an open house before, but this opportunity demonstrated to me that we really can (and should) "Labvocate" to anyone!

Looking for promotional items to share at an event?

Email us at **info@csmls.org** for more information. We can send digital pamphlets, posters, stat cards with facts about all you do, a PowerPoint presentation and more.

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2021 PREMIER'S AWARD
Recognizes a Lab Leader

Photo courtesy Christine Bruce.

"When I learned I was being nominated, I thought who, me? And then when I learned how rarely this honor falls to lab professionals, I was instantly humbled, and just so proud to represent my profession in this special way. I still can't believe it."

– CHRISTINE BRUCE

Awarded each year to trailblazing Ontario college graduates, the Premier's Award is an esteemed honour for many professionals and industry leaders. Last November, CSMLS member and award-winning laboratory professional Christine Bruce was nominated in the Health Sciences category.

Known as a thought-leader within the profession, this nomination was years in the making. In 2020, she was awarded the prestigious Gaman J. Modi Award of Excellence from CSMLS, with Modi in attendance for the award ceremony on University Avenue in Toronto.

Yet, she is most recently recognized for her work in the pandemic. As the director of the Sinai Health/UHN shared microbiology lab, she, with Dr. Tony Mazzulli, successfully guided their team to be the fi st hospital lab in Ontario to test for COVID-19. Now the senior director of University Health Network's laboratory medicine program, she is described as the epitome of a servant leader, modelling high standards of care with compassion.

The Premier's Award nomination spotlights not only Christine and her incredible career accomplishments, but the profession as a whole. Medical laboratory professionals were some of the fi st health care workers to be immersed in pandemic duties, and the demand for testing has not let up. Having a medical laboratory professional nominated and recognized for their pandemic work helps to raise awareness of the profession's vital role in health care.

Congratulations, Christine, on the nomination – a first for a medical laboratory professional!

Society News

LAB WEEK 2022:
THE LAB CONTINUES TO SHINE

National Medical Laboratory Week celebrations are one way to shine a light on the work done in the lab, now in a pandemic, and beyond.

Th oughout the week, we'll be sharing stories from the lab to help Canadians gain a better understanding of your role in their health care. The stories are inspiring and powerful, and they reveal the truth of your great work.

You can follow along on social media, @csmls on Facebook and Twitter and @csmls_scslm on Instagram, to learn about your colleagues, read their stories and share them with your peers.

We encourage you to also use social media to share Lab Week with your network. You can download pre-written social media posts, DIY celebration items and games at www.labweek.csmls.org.

The week is about shining a light on medical laboratory professionals, so to recognize you, there will be monuments across the country lit up in indigo.

We don't believe the celebration should be limited to just one week. We will continue to share your stories, photos and messages so Canadians know that medical laboratory professionals are continuing to work for them, all year long.

CSMLS member and artist Noemi Divino provided the artwork for the 2022 Lab Week posters.

THANKS FOR ALL YOU DO!
NATIONAL VOLUNTEER WEEK 2022
APRIL 24-30

Every facet of CSMLS is powered by volunteers. From the Board of Directors to the Exam Panel to the Educator Committee, we rely on the dedication and commitment of our volunteers to drive our programs, committees and initiatives forward.

To mark National Volunteer Week, CSMLS would like to thank each and every one of our volunteers; you are the heart of our organization and the community-builders of the laboratory profession. Thank you for volunteering your time, knowledge and expertise to give back to your fellow professionals and the Society.

Each year, we send a thank you gift to our volunteers. In 2021, volunteers received CSMLS-monogrammed blankets for some much-needed down time. Thank you to all volunteers who shared photos of their gifts to social media.

Visit **csmls.org > Membership > Volunteers > National Volunteer Week 2022** to see the list of our 2021 volunteers and celebrate their contributions to the profession.

INVITATION TO THE CSMLS **ANNUAL GENERAL MEETING**

The 2022 Annual General Meeting (AGM) will be held virtually on Saturday, May 14, 2022. Details on how to register will be emailed directly to members and available through eNEWS.

Eligible CSMLS members are entitled to vote on motions during the AGM. If you cannot join the virtual meeting, you can still have your voice heard by assigning a proxy to vote on your behalf. Learn more about proxy voting at go.csmls.org/proxy.

During the AGM, the results of the Board of Directors election will be announced. These elected directors are volunteers tasked with the responsibility of making decisions and guiding the management of the Society, which affects all members in Canada. Directors represent the CSMLS at various events and sit on board committees such as Grants, Scholarships & Awards; Legislation; and Finance; as well as special committees or taskforces.

This year, there were four open offices. Two offices, however, were acclaimed when the primary candidates ran with no opposition. Here are the nominees for the open offices as well as two of our 2023 incoming directors, who will begin their terms in January.

Director, Alberta, Northwest Territories & Nunavut (position acclaimed)
Valentin Villatoro

Director, Atlantic
Kim Alkalay
Tiffany Clouston

Director, Bilingual (position acclaimed)
Marie-France Jémus

Director, MLA
Hansika Deepak
Allie Shields
Nickole Wlasichuk

CSMLS members were notified of the election through eNEWS and direct email. Voting for the Board of Directors was conducted through a secure online system. The results are confirmed by our auditor, Stephen Lohocki & Associates before they are revealed at the AGM.

2021 Annual Report

The CSMLS 2021 Annual Report will be available to view on the CSMLS website in April.

Visit **csmls.org/AnnualReport** to view the full report, including financia figu es, achievements, member awards, milestones and more.

NATIONAL VOICE

As the national voice of Canada's medical laboratory profession, CSMLS represents the needs and concerns of medical laboratory professionals when working with laboratory and health care related organizations. The CSMLS Board of Directors, staff and volunteers attend meetings, conferences and events on behalf of CSMLS members and the entire medical laboratory profession.

We continue to take the necessary precautions to keep staff, collaborators and members safe, so many of the meetings we usually attend in person are now virtual or via phone. While not all events contribute directly to the national voice, we have been working with media, policymakers and collaborators each month. Here is where your voice was recently heard.

NOVEMBER

Conference Board of Canada: National Immigration Centre (NIC) — Members Meeting
VIRTUAL MEETING

The Michener Institute of Education: MLA to MLT Laddering Feasibility
VIRTUAL MEETING

Manitoba Association of Medical Laboratory Science (MAMLS) Annual General Meeting
VIRTUAL PRESENTATION

British Columbia Institute of Technology: Exam Timing for Clinical Genetics
VIRTUAL MEETING

Presentation to Canadian Society for Association Executives (CSAE) – Culture is King
VIRTUAL CONFERENCE

Canadian Association of Allied Health Professions (CAAHP): Mental Health Survey Findings – Joint Presentation with Canadian Association of Medical Radiation Technologists (CAMRT) and Sonography Canada (SC)
VIRTUAL PRESENTATION

Colleges and Institutes Canada (CICAN) Virtu-WIL Advisory Committee: Simulation
VIRTUAL MEETING

Red River College Presentation: Generations and Customer Service
VIRTUAL PRESENTATION

Government of Canada – Sectoral Workforce Solutions Grant Funding Meeting
VIRTUAL MEETING

Anderson College: IEMLT Bridging Program Letter of Support
VIRTUAL MEETING

The CSMLS is a member of the National Immigration Centre (NIC), which is run by the Conference Board of Canada. The NIC is a not-for-profit o ganization that aims to strengthen Canada's immigration system by hosting events and publishing evidence-based research.

CSMLS attends quarterly member meetings to provide a laboratory-specific pe spective to NIC projects. As immigration and bridging programs are part of our long-term strategy to mitigating the MLT shortage, we are proud to participate in the NIC's initiatives.

DECEMBER

Government of Canada – Sectoral Workforce Solutions Grant Funding Meeting
VIRTUAL MEETING

HEAL (Organizations for Health Action) Quarterly Meeting
VIRTUAL MEETING

Manitoba Health Policy Analyst – Consultation on Regulatory and Policy Scan
VIRTUAL MEETING

College of Allied Health Professionals of PEI/CSMLS – Orientation
VIRTUAL MEETING

Regulation Meeting with College of Medical Laboratory Technologists of Ontario (CMLTO)
VIRTUAL MEETING

Using Labs Wisely Steering Committee (Choosing Wisely Canada)
VIRTUAL MEETING

The Michener Institute of Education: MLA to MLT Laddering Feasibility
VIRTUAL MEETING

JANUARY

Saskatchewan Society of Medical Laboratory Technologists (SSMLT) – Provincial Recruitment Plans
VIRTUAL MEETING

Colleges and Institutes Canada (CICAN) Virtu-WIL Advisory Committee: Simulation
VIRTUAL MEETING

OnTechU – Micro-credentials and Interprofessional Education Project
VIRTUAL MEETING

BC Allied Health Policy Secretariat Presentation: Findings from Strategy Consultation
VIRTUAL PRESENTATION

Regulation Meeting with College of Medical Laboratory Technologists of Ontario (CMLTO)
VIRTUAL MEETING

Regulation Meeting with College of Medical Laboratory Technologists of Alberta (CMLTA)
VIRTUAL MEETING

Pre-Budget Consultation with Ontario Minister of Finance Peter Bethlenfalvy
VIRTUAL MEETING

EQual Canada (Accreditation Canada) – Accreditation of Ontario Medical Laboratory Assistant Programs
VIRTUAL MEETING

Virtual School Visit: Student Presentation
VIRTUAL PRESENTATION

Advocacy Outreach Meeting on MLA Regulation with Alberta Minister of Health Jason Copping
VIRTUAL MEETING

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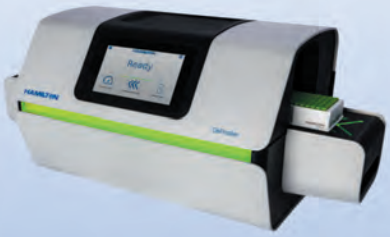

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