



e – LABorate

MN Newsletter

October 2022



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Message from Your President

~ Charlotte Romain MS, MLS(ASCP), ASCLS-MN President

It's been a busy year so far! We have had some successful CE events in the Metro area and are working on some fun things for our members in the Northern and Southern areas of the state. We now have a Senior Director in the Northeast Area! Mary Rauvola is working hard to get some CE and networking events planned in the Duluth area. Stay tuned for a lab night out in mid-February!

The ASCLS National House of Delegates (HOD) was held on January 15th via Zoom. There were too many important conversations to cover fully in our newsletter here. There were many laboratory advocacy issues we as members were called to address in 2022. PAMA was delayed, not fixed and the VALID Act was not passed in the most recent congress. Look for more information in the next year for additional advocacy opportunities on these topics.

There was discussion about how the city/venue is chosen for the ASCLS National Meeting. The issue came up due to a request to move the 2023 meeting from New Orleans because Louisiana voters failed to remove a clause in their state constitution that would have eliminated the worst abuses of the prison system. There was a robust discussion and there are a lot of issues to consider when choosing a meeting site and the discussion will continue in the future.

Data from the 2022 Constituent Society Health Assessment was presented by the board. The ASCLS-MN Board of Directors will be analyzing that information and I will give a report at our annual membership meeting at the CLC.

Mpox (monkeypox) in Minnesota: A brief overview of the disease and the laboratory response to the 2022 outbreak

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Note: All editorial or personal comments expressed herein are my individual opinions and do not necessarily represent those of the Public Health Laboratory, the Minnesota Department of Health, or the State of Minnesota.

Intro/Background

While Mpox cases are thankfully on the decrease both in Minnesota and nationally, there is value in summarizing some key points about the disease formerly known as Monkeypox, as well as pearls about the diagnosis and testing thereof.

Mpox is a viral zoonotic disease caused by the monkeypox virus – a large, double-stranded DNA virus in the orthopoxvirus genus. There are two sub-species (or clades) of the monkeypox virus: Clade I (also known as the Central African or Congo Basin clade) and Clade II (West African). This distinction has important effect on human health, as Clade I infections are typically more severe and appear to have more person-to-person spread than Clade II. As a poxvirus – and thus related to the virus that caused smallpox – the mpox virus generally causes much less severe disease, though there are rare exceptions, particularly in severely immunocompromised patients.

First characterized in 1970, mpox cases have largely been associated with direct exposure in Africa, though there have been notable exceptions. A 2003 midwestern U.S. outbreak led to 47 confirmed or probable cases that was eventually linked to the importation of several hundred small African mammals for the exotic pet trade. These animals were housed near pet prairie dogs before sale: the prairie dogs were identified as the direct transmission source for the human cases in this outbreak.

Mpox is endemic to several countries in central and western Africa. As a zoonotic disease, infection had typically been caused by close contact with an infected animal. The 2022 Mpox outbreak – driven by a Clade II virus – was first identified in the U.K. in early May in a patient who had recently visited an endemic country (Nigeria), but this was followed less than two weeks later by a cluster of four cases not associated with travel – suggesting an unusual transmission mechanism. The first U.S. case was identified on May 17th, and cases rapidly spread through the summer.

MN/National Statistics

As of 12/8/22, there have been 234 verified mpox cases in Minnesota – fortunately with only 10 hospitalizations and no fatal cases. Roughly 95% of MN cases have been in the Twin Cities Metro area and 5% in Outstate MN. Nationally there have been ~30,000 Mpox cases with 20 fatal cases (largely in severely immunocompromised individuals).

(<https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html>)

Clinical Symptoms

Like most poxvirus infections, mpox is classically a disease with a prominent rash phase. The rash can often initially look like pimples or even tiny blisters: often the rash is painful, itchy, or both. Systemic symptoms of mpox typically include flu-like symptoms (fever, chills, swollen lymph nodes, etc.), though these may occur before or after the rash presentation – or occasionally not at all. (<https://www.cdc.gov/poxvirus/monkeypox/clinicians/clinical-recognition.html>)



Sample Collection

The best sample collection for mpox is done by vigorously swabbing a suspect lesion using a polyester/Dacron swab. While other synthetic fiber swabs can also work, foam swabs are typically too soft for an adequate collection and cotton swabs have several characteristics that can interfere with extraction. In addition, since Orthopoxviruses are most stable when kept dry,

most labs prefer that the swabs are placed in an empty (i.e., no medium) sterile tube for transport. (Note: some large reference labs have validated an alternative testing protocol using a liquid transport medium; MDH only uses the dry swab method for increased test sensitivity and specimen stability.) Testing can also be done on scabs, but the CDC has recommended against routine scab collection.

More details about specimen collection and submission requirements can be found online at <https://www.health.state.mn.us/diseases/monkeypox/hcp.html#test>

Diagnosis & Testing

The Infectious Disease Lab at the Minnesota Department of Health Public Health Laboratory (MDH-PHL) uses a CDC-developed and FDA-cleared Real-Time Polymerase Chain Reaction (RT-PCR) test to look for the presence or absence of monkeypox virus DNA in a clinical sample. For several both technical and medico-legal reasons, this test does not look for monkeypox virus specific sequences, but rather for DNA regions common to many non-variola Orthopoxviruses (NVO). While this technically means that the NVO test could not differentiate between, say, monkeypox virus and camelpox virus, the odds of this are exceptionally low as no other outbreaks of these other NVO viruses have been identified in the U.S. during normal surveillance activities. In fact, the odds are so low that a positive sample by NVO wouldn't be mpox that CDC has formally ruled that all positive NVO cases should be presumed to be mpox for the duration of the outbreak response. Regardless, MDH-PHL does send all positive mpox specimens to CDC for further characterization to ensure nothing slips past us.

Conclusion

While this mpox outbreak was largely focused in a roughly three-month window during the summer of 2022 and has been slowly winding down over the past several months, there are a number of excellent lessons we can take home as laboratorians. The importance of high-quality specimen sampling techniques. The benefits of having highly trained, motivated laboratory staff when testing volumes skyrocket. The interconnected nature of our work with those of our partners in Epidemiology, Community Health, and many others. And, perhaps most of all, a reminder that every specimen comes from a patient who may be anxiously awaiting our lab result: we do everything we can to make sure that answer is the correct one for every sample that comes through our labs.

Other Resources

MDH-PHL Clinical Guide to Services: <https://www.health.state.mn.us/diseases/idlab/gts/testlist.html>

MDH Monkeypox (Mpox) Information for Health Professionals: [Monkeypox \(Mpox\) Information For Health Professionals - MN Dept. of Health \(state.mn.us\)](https://www.health.state.mn.us/diseases/monkeypox/hcp.html)

MSH Health Alert Network (HAN): <https://www.health.state.mn.us/communities/ep/han/index.html>

CDC Biosafety Laboratory Guidance for Handling and Processing Mpox Specimens: <https://www.cdc.gov/poxvirus/monkeypox/lab-personnel/lab-procedures.html>

Call for Volunteers

We have several positions open both on the ASCLS-MN Board and Committees.

Please contact me if you are interested in helping this year!

marsh397@gmail.com

- Government Affairs Committee
- Newsletter Editor
- Developing Profession (formerly Student Forum Chair)
- Area Directors
 - Southwest
 - Northeast
 - Northwest/Central

[Link to Job Descriptions](#)

Member Spotlight

I am Victoria Nemitz and I am the Point of Care Testing Specialist at United Hospital-Allina Health. I have been a certified Medical Laboratory Scientist since October 2017. At United hospital, I oversee the training and education of all point of care operators. This includes Abbott I-STAT operators, Abbott Freestyle glucose meter operators and Qiagen Amnisure operators. In total, I have over 2000 users I am responsible for. Before I took on this role for Allina, I was a generalist in United's Main Lab. When I started, United hospital was a 350 bed hospital but has grown to have over 500 beds in the last 5 and a half years. This expansion includes both our ER where we use I-STATs and our Mother baby unit where we use Amnisure testing. Because of the expansion of non-lab testing personnel and the request for expanded testing capabilities in the hospital, I was chosen as the first formal Point of Care Coordinator for United Hospital in St. Paul Minnesota.

I became a member in ASCLS while still in school at the University of Minnesota. I went to the Clinical Laboratory Collaborative (CLC) and thought it was absolutely magical. I went to the CLC the next two years and started to ask how I became involved with planning the next Collaborative. I asked to sit in on the planning committee and slowly started helping put the CLC together. 2023 will be my 2nd year involved with planning. During my time at the University, I helped some of my professors go to high schools and run many lab experiments for their science classes. While participating in these educational events I fell in love with advocacy and sharing my love of science with high schoolers and middle schoolers. Allina also had career days that I helped set up and participate in. We set up booths for students specifically interested in finding a healthcare field and told them about what we do down in the lab. I continued asking for opportunities to help advocate for the profession through Allina and I now work with the education coordinator at Allina to help go to events and excite the younger generation about laboratory science. This love of advocacy from my career's infancy led me to become interested in building up our laboratory science community. I got in contact with Galina Dronova and asked to help plan the Scientific Assemblies in the metro Area. With Galina Dronova, Austin Korcsak and myself we were able to support each other through planning 2 years of scientific assemblies. In 2022, we grew our small committee to include Duluth and Rochester representatives to help create a community in Minnesota's ASCLS. We are hoping to help put on more events in Rochester and Duluth so they can build a stronger ASCLS membership in those areas. We also hope to plan more ASCLS happy hours this year, to excite all generations about being laboratory professionals when the profession needs it the most!



:00 pm – 7:30 pm

Continuing Education Opportunity

Saturday Morning in Rochester

February 18th, 8:30 – 11:00 am

Location: The Quarry Nature Center

701 Silver Creek RD NE

Rochester, MN 55906

Topic: Blood Bank Case Studies

Evening in Duluth

February 20th, 6 pm – 7:30 pm

Location: Essentia Health/St. Mary's Medical Center - Flyer

Duluth, MN

Topic: An Update on Acute Myeloid Leukemia: From Morphology to Molecular

Clinical Laboratory Collaborative Meeting Comes to Mankato!

The Minnesota Clinical Laboratory Collaborative (CLC) is a one of a kind conference that has taken place annually under the name since 2005. Unlike other Continuing Education credit opportunities offered in Minnesota, the CLC combines the efforts of multiple organizations representing the medical laboratory profession. Organizations rotate each year to co-chair the event planning, with this year's full list of contributing organizations: AGT, ASCLS-MN, ASCP/CLMA, MIMA, MNABB, and MNAMT.

The theme of the 2023 CLC is celebrating 100 years of innovation and education. The colors of blue and gold represent a combination of anniversaries - 100 years of the University of Minnesota Medical Laboratory Sciences program together with 100 years of American Society for Clinical Pathology (ASCP). It is also the inaugural year for Mankato to host the event at the Mayo Civic Center.

As a highlight for the conference theme, the two keynote speakers are at the forefront of education and will be hosting their book signings throughout the day. On April 12, Dr. Alan HB Wu kicks off student day with a presentation on how to bring medical laboratory science to the general masses in his "Medical Lab Science Comes to Hollywood!" keynote. As an author of books such as *The Hidden Assassin: When Clinical Lab Test Go Awry* and multiple television/movie script pitches, he will speak on the importance and impact of visibility in our profession. Meet him later for a book signing and join a breakout session!

On April 13, Elizabeth Powers, MD, a sought after speaker, consultant, and CEO of EPower & Associates will share with us the three magic questions that help us survive in unique challenges of working in the lab. Learn more about her work at elizabethpower.com and get ready to be inspired by her vibrant energy. In addition to her keynote and breakout session, she will also be available throughout the day for a meet-and-greet and book signing.

Join us in Mankato on April 12-13, 2023 for our annual celebration! Registration opens on February 7th, 2023. Visit ASCLSMN.org to view and share the Save The Date flyer and future registration link. RSVP on Facebook today to keep up with event updates and details!



Galina Dronova
CLC Publicity Chair
ASCLS-MN President Elect

Leadership Academy

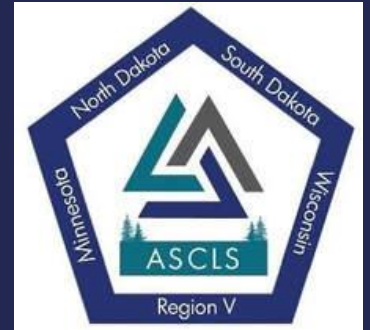
ASCLS Region V has a wonderful opportunity that is available to any ASCLS member from Region V. The Leadership Academy provides guidance, education, and resources at a regional level to prepare ASCLS members for leadership roles in ASCLS and within the profession.

There is no charge to participate in the Region V Leadership Academy program for members from Region V, however travel and meeting registration costs should be considered when applying. The host state societies do assist their participants with expenses.

The Academy is a 12-month program running from October to October and covering topics including:

★ History of ASCLS ★ Leadership and communication styles ★ Goals and strategic planning ★ Organization skills and time management ★ Conflict management ★ Conducting successful meetings ★ Professional advocacy ★ Recruitment strategies

P.A.C.E™ continuing education credits will be awarded for each session completed. The Leadership Academy is an opportunity to pursue leadership, professionalism, management, and self-knowledge. For more information visit <https://www.asclsmn.org/region-v-leadership-academy>



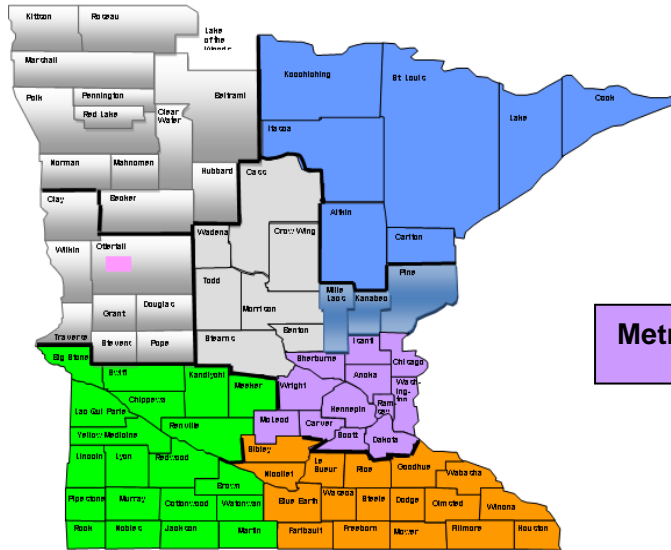
Membership Development

OPEN POSITIONS!

We are currently looking for Area Directors for the Southwest, and Northwest/Central Areas.

North West Central Area

North East Area



Southwest Area

Metro Area

Southeast Area

Current membership: **206 (up from 175 in October!!)**
Emeritus – **9**
Ascending Professional – **25**
Developing Professional- **56**
Professional – **114**
Sustaining Members - **10**
Community/Honorary – **2**

For More Information Visit:

<https://www.asclsmn.org/>

<http://www.regionvascls.online/>

www.ascls.org

facebook.com/ascls.mn

A Word from the Editor

~ Charlotte Romain/ASCLS-MN President

If you have any comments, suggestions, or would like to contribute an article to the newsletter, please email me at marsh397@gmail.com