

NEWSLINKS

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AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE - MICHIGAN

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President's Message

Stephanie K Mabry

Greetings ASCLS-Michigan Members! I hope you all been having a wonderful and productive Fall! I can hardly believe November is upon us, but it is, and along with it an increased focus on Thankfulness. In the spirit of the season, I want to share with you my Top Ten reasons I am thankful for ASCLS!

- 1. **Investment in Students:** I initially became involved in ASCLS as a student, and over my time with ASCLS I have seen firsthand the multitude of investments ASCLS makes in students who are working toward entry into the profession. Students are the future of the profession, and ASCLS invests in students through scholarships, awards, travel grants, a dedicated Developing Professional Forum, and special events such as the recent Eat and Greet in Lansing! (pictured below)
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- 2. Patient Safety: ASCLS is a leader in patient-centered, evidence-based practice in laboratory medicine, with tips, resources, are more frequently being posted by the ASCLS Patient Safety Committee in their Member Community. Additionally, ASCLS-Michigan has also recognized the importance of Patient Safety and Patient-Centered Care with the establishment of a statelevel Patient Safety Committee at the most recent Board Meeting this past September!
- 3. Legislative Advocacy: ASCLS is a preeminent sponsoring organization of the Legislative Symposium each March, but ASCLS members also participate in legislative advocacy all year long via the ASCLS Action Center, individual visits with state and local legislators, or simply by supporting the organization's efforts with their membership! These grassroots efforts to address workforce shortages, reimbursement cuts, and other critical issues are vital to the success of our profession, and I am grateful ASCLS is there to advocate on my behalf!
- 4. **The PAC:** Hand in hand with Legislative Advocacy, ASCLS is the only laboratory organization with a Political Action Committee, which means ASCLS is the only laboratory organization actively working to ensure reelection of lawmakers who have shown support of laboratory issues like those mentioned above! Additionally, I am grateful for the generous donations of ASCLS members to the PAC, thereby ensuring its success!

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- 5. **Publications**: ASCLS publications, such as this newsletter (Newslinks), ASCLS Today, the Member Communities, Daily Digest emails, social media, websites, etc. ensure that I as a laboratory professional remain updated on the legislative issues facing my field, the investments being made in students, and opportunities for professional growth and advancement, some of which also made my Top Ten list!
- 6. **Conferences:** A leader in quality education, ASCLS has given me some of my most enjoyable and impactful Continuing Education I have received during my time as a laboratory professional. The social aspects of convening with like-minded professionals to discuss, learn, and celebrate what we do is the best experience there is!
- 7. **Leadership Development:** I can honestly say that my career would not be where it is today without the Leadership Development opportunities ASCLS has afforded me, from formal opportunities such as the Leadership Academy or leadership positions on the ASCLS-Michigan Board, to informal opportunities such as networking, mentorship, or valued advice from experienced leaders.
- 8. **Mentorship:** Along with Leadership Development, ASCLS has been the greatest source of mentors I have come across in my personal or

- professional life. The chance to network with, seek advice from, or become friends with some of the most well-renowned laboratorians in the country is unlike any other opportunity I could imagine or achieve without ASCLS. ASCLS also has an established Mentorship program, to share this asset with students and new professionals (another investment in the Developing and Ascending professionals)!
- 9. **Friends:** I would be remiss if I didn't also mention that in addition to the wonderful source of mentors, ASCLS has also been a great source of friendships! From conference travel buddies, to Board meeting road trips, and everything in between, I wouldn't trade the personal connections I have made through ASCLS for anything!
- 10. **Memories:** While tenth on my list, the memories ASCLS has given me really encapsulate everything in the previous nine; I remember attending my first ASCLS-Michigan meeting as a student and being in awe of the professional environment I witnessed there, or my first Legislative Symposium and the sense of pride I felt in seeing so many laboratory professionals stepping outside of their comfort zones to do something they knew was important. I remember countless meetings, celebrations, social events, mentors, and friends, and look forward to all the future memories I will make as a part of this special organization!

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ASCLS-Michigan Newslinks

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for a complete listing and contact information for all ASCLS-MI board members and a wealth of other information on the Society.

Editor: Paul Guthrie

1506 Bacon Avenue Portage, MI 49002 pfgu3@aol.com

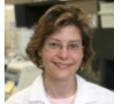


One of my favorite ASCLS memories was when Region IV won the PAC-tastic trophy at the 2019 Legislative Symposium (pictured at left).

I hope that as you read this, you too have reflected on the aspects of ASCLS for which you are grateful! Whether or not you take advantage of every opportunity ASCLS offers, your support of the organization supports all these efforts to move the profession forward, and for that, I must add an 11th item to my list; this November, I am grateful for YOU, a loyal ASCLS-Michigan member!

THANK YOU for everything you do to support our profession through your membership! Also, if you have anything you would like add, I'd love to hear about it at Stephanie.Mabry@outlook.com and feature it in a future article! So, what about ASCLS makes you grateful? Or, what is your favorite ASCLS memory? I can't wait to hear from you, and wish you all a happy and heartwarming holiday season!





Educating Our Medical Laboratory Educators

Kathleen Hoag, Ph.D., MLS(ASCP)^{cm}
Chair, ASCLS CEPI and Education Scientific Assembly representative for ASCLS-Michigan

As with many health professions, those who choose to become Medical Laboratory Educators most often begin their careers at entry-level and then later decide to become an educator. This means that our medical laboratory educators are well-trained as medical laboratory technicians or scientists and likely have years of experience on the bench. The challenge in transitioning to an educational career is the understanding **pedagogy**, which Merriam-Webster dictionary defines as "the art, science, or profession of teaching" ¹. Just like hematology, immunohematology and microbiology, the teaching profession has its own language and customs that can be bewildering to new medical laboratory science educators with little to no educational training experience. ASCLS is here to help!

Over the last few years, the ASCLS Committee on Educational Programs and Initiatives (CEPI) has been hard at work coordinating the development of the

Laboratory Educators Institute (LEI). CEPI committee members accept module proposals from seasoned medical laboratory educators, and work with them to create the best possible learning experience. The modules generally consist of a voice recorded PowerPoint presentation, a downloadable handout, other take away reference sheets, and a quiz to earn P.A.C.E. credit for completion. ASCLS charges only a nominal fee of approximately \$10/P.A.C.E. credit, to cover the cost of the online Learning Management System used for course delivery. The ASCLS LEI modules can be easily found from the Education-Meetings drop-down list on the main ASCLS.org homepage, as shown in Figure 1.

The ASCLS LEI currently has six modules available to help educators hone their skills, authored by Kathy Doig, Brooke Solberg, Toula Castillo and Joel Mortensen. Eight other new modules are in development. The current modules available include:

- 1. The Affective Domain in Laboratory Education
- 2. Writing Instructional Objectives Part 1: The Quick Start Guide
- 3. Writing Instructional Objectives Part 2
- 4. The Nuts and Bolts of Assessment and Evaluation: It's Not Just About the Outcomes!
- 5. Tests and Test Questions: Best Practices for Composing Multiple Choice, True/False and Essays
- 6. A Molecular Microbiology Primer for Medical Laboratory Educators

In addition to the online modules, ASCLS CEPI is helping to develop a New Laboratory Educators **Workshop** which will occur in conjunction with the 2020 Clinical Laboratory Educators Conference (CLEC) in Orlando, FL. The New Laboratory Educators Workshop will be a two-hour interactive learning experience designed specifically for brand new medical laboratory educators who are transitioning from a clinical laboratory position to a faculty position. The workshop will take place in the morning of Thursday, February 27, 2020, before the official opening keynote address of CLEC. Drs Kathy Doig and Susan Beck will lead a discussion of course, classroom, and student management. Further advice will be given on deciding what to teach, setting behavior expectations for students, and more. A seasoned educator panel will join Drs. Doig and Beck, and attendees will have an opportunity to "Ask the Experts" to cap off this learning experience. If you know a new medical laboratory educator who could benefit from this wonderful opportunity, please pass the information along!

In closing, I'd like to thank all the seasoned laboratory educators and CEPI members who have worked tirelessly to propose, create and edit the LEI modules available. It is truly a labor of love and a desire to "Pay it Forward" ² which makes all of this, and ASCLS work in general, possible. If you have a LEI module topic you'd like to propose, please submit the proposal by







Figure 1. Accessing ASCLS Laboratory Educators Institute (LEI) Modules from ASCLS homepage.

scrolling to the bottom of the page at https://www.ascls.org/educatorresources and submitting as instructed on the form. Likewise, if you have seen an educator's presentation at a meeting which you thought was just amazing, approach the presenter and suggest they submit a LEI module proposal. We want to reach as large an audience as possible with a diverse array of education topics which meet the needs of ASCLS educators in a just-in-time delivery system.

References:

- 1. https://www.merriam-webster.com/dictionary/pedagogy; accessed October 1, 2019.
- 2. Pay it Forward by Catherine Ryan Hyde, Simon and Schuster Publishers, 2000.

Eastern Equine Encephalitis (EEE) Virus

Christina Lim, M.S., MLS(ASCP)^{CM}SM^{CM}

Eastern Equine Encephalitis (EEE) is a rare but serious disease of the brain. It is caused by the Eastern Equine Encephalitis virus (EEEV), an arbovirus (or arthropod-borne virus) that infects birds, humans and other mammals such as horses. Most members belong in the genus alphavirus of the *Togaviridae*, have a single-stranded RNA genome and are transmitted through bites of mosquitoes, ticks, or sandflies. Birds serve as the primary reservoirs for EEEV, and humans and other mammals are considered dead-end hosts because the viremia is too low to support transmission of the virus.

The vector of EEEV are the *Culiseta melanura* mosquitoes which feed exclusively on birds. Therefore, the spread of EEEV to humans and other dead-end animal hosts requires another mosquito vector (such as Aedes, Coquillettidia, or Culex) that feed on sick birds and then mammals. EEEV was first recognized in 1831 Massachusetts, in horses. The first confirmed human case was identified in 1938 in the Northeastern Unites States. EEEV can only be transmitted to humans by bites of infected mosquitoes and cannot be spread from person to person. According to the CDC, from 2009 to 2018, three to fifteen cases of EEE were reported annually in the U.S. This year, more than 30 human cases have been reported, with most cases occurring in Massachusetts, New York, Michigan, North Carolina, and Florida that contain the hardwood swampy areas where the mosquito vector thrives.

Eastern equine encephalitis virus neuroinvasive disease cases reported by state of residence, 2009–2018



Source: ArboNET, Arboviral Diseases Branch, Centers for Disease Control and Prevention

Most infections of EEEV are asymptomatic. About 5% of those infected may show symptoms 4-10 days after being bitten by an infected mosquito and presents as either systemic or encephalitic illness. The systemic illness includes headache, fever, chills and vomiting, muscle joint and fatigue, and can progress to encephalitic that include neurologic issues such as brain inflammation (encephalitis). disorientation, seizures and coma. In these cases, cerebrospinal fluid findings of neutrophilpredominant pleocytosis, elevated protein level and normal glucose levels are common. MRI of brain lesions include neuronal destruction and vasculitis. About 30% of those who develop EEE die, the highest among arbovirus transmitted in the US (Michigan Department of Health and Human Services). Persons over the age of 50 and under the age of 15 seems to be at greatest risk for developing severe disease when infected with EEE virus. There is no human vaccine against EEE or anti-viral drugs for treatment of the disease. For severe illnesses, supportive treatment includes hospitalization, IV fluids, and respiratory support.

Rapid and accurate diagnosis of acute neuroinvasive

EEE virus disease is based on a combination of a consistent clinical presentation in an endemic area, and by the detection of EEE virus-specific IgM antibodies in serum or CSF. This test is performed at the state lab, the Arbovirus Diagnostic Laboratory at CDC, and in some commercial laboratories. It is a two-part testing method that begins with an IgM capture ELISA test, MIA (Microsphere-Based Immunoassay) or IgG ELISA. If this initial test is positive, a plaque reduction neutralization test (PRNT) is performed for confirmation. The PRNT distinguishes the presence of EEEV-specific neutralizing antibodies from those of other alphaviruses such as Chikungunya virus or Venezuelan equine encephalitis virus. Antibodies produced against one alphavirus can weakly cross react with other alphaviruses, therefore the confirmatory testing is required to confirm the infection. In the PRNT assay, the patient serum is incubated with the virus in question then added to a plate of cells. If the antibodies are not present, the virus will infect the cells and form plaques which are quantified. If the patient has the antibodies against the test virus, the antibodies will neutralize the virus and the number of plagues formed will be reduced. A fourfold change in antibody titer between an acute and convalescent serum or by the presence of antibodies in a single cerebral spinal fluid (CSF) specimen confirms an acute arbovirus infection (MDHHS Arbovirus Plaque Reduction Neutralization Test.)

The best and simplest way to prevent EEE is to prevent mosquito bites by covering exposed areas of the body especially arms and legs, wearing insect repellent on skin and clothes, maintaining screens on doors and windows as well as avoid letting water collect in places like flower pots and buckets which can become breeding grounds for mosquitoes.

For a more in-depth look at EEE, attend the talk in ASCLS-MI 2020 in Kalamazoo.

Additional references:

- Eastern Equine Encephalitis | Eastern Equine Encephalitis | CDC. Retrieved from https://www.cdc.gov/easternequineencephalitis/.
- 2. https://www.michigan.gov/documents/mdhhs/FAQs EEE Response v9.272 666971_7.pdf
- 3. Gill, C. M., Beckham, J. D., Piquet, A. L., Tyler, K. L., & Pastula, D. M. (2019). Five Emerging Neuroinvasive Arboviral Diseases: Cache Valley, Eastern Equine Encephalitis, Jamestown Canyon, Powassan, and Usutu. Seminars in Neurology, 39(04), 419–427. doi: 10.1055/s-0039-1687839



Birthplace of ASCLS-Michigan

Historical facts shared by Kathy Doig



During the late 1930s and early 1940s, the American Society for Medical Technologists (ASMT, now ASCLS) encouraged independent state and local societies to affiliate with the national society. In this period, there was no local or state society in Michigan, even though ASMT was incorporated in Michigan. That was largely at the convenience of the Executive Secretary, John Conlin, who lived in Detroit. Louise Vance was the Great Lakes Counsellor, the equivalent of our current regional director. She persuaded a small group of "Michiganites" to form a state society and to immediately affiliate with the national organization. Edna Lunecke served as the first president with secretary, Aino Osterberg. The reports of these events appeared in the national society's journal, the American Journal of Medical Technology (AJMT), in 1946. *Am J Med Tech. 1946; 12(3): 136-137*

MICHIGAN

From now on the Ferguson-Droste-Ferguson Sanitarium of Grand Rapids, Michigan, will be known as the birthplace of the Michigan Society of Medical Technologists. For on April 13, 1946, the body of an Michigan organization started taking form under the able counseling of Miss Louise Vance, 105 South York Street, Elmhurst, Illinois (Great Lakes Counsellors Board of the A.S.M.T.)

The chairman of this initial meeting was Miss Gladys Jacobs, of Bay City. Other Michiganites who attended the meeting were:

Miss Edna Luneke, Grand Rapids, Michigan

Miss Helen Psik, Jackson, Michigan

Miss Harriett Sadowski, Detroit, Michigan

Miss Mary Catherine Wethington, Detroit, Michigan

Mrs. Mildred Snover Zuidema, Port Huron, Michigan

Bay City, Michigan, June 8th, 1946, is the date set for the organizational meeting. All registered medical technologists in Michigan are urged to attend this meeting. The tentative program is as follows:

Afternoon, to be devoted to a scientific program,

Followed by a business session at which time the tentative constitution which was drawn up on April 13th, 1946, will be presented for approval and officers will be elected to pilot the Michigan

Society of Medical Technologists to the place in the great organization Society of Medical Technologists to the place in the great origination of the American Society of Medical Technologists that most States in this our United States already are clamoring for.

The program will be climaxed by a banquet in the evening. Congratulations, Michigan. Cooperation is the key to successful organization.

Submitted by
CECELIA M. KORTUEM, R.N., M.T. (ASCP)
Editorial Staff.

Happy 73rd Birthday to ASCLS-Michigan!



OUR NEWEST STATE SOCIETY

A state charter is in the process of being granted, and the Michigan Society of Medical Technologists is planning to affiliate with the national association on November 2, 1946, at the time of their fall meeting in Detroit. The afternoon of the meeting will be devoted to a scientific talk and demonstration. There will be a short business session followed by a dinner and "get acquainted" hour in the evening.

Am J Med Tech. 1946; 12(6): 291.

Doing that Marie Kondo Cleanout?

Suzanne Butch

Consider a donation to the ASCLS-Michigan historical records. Send your materials to:

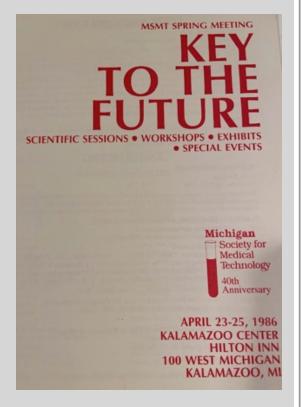
Suzanne Butch 1508 South Blvd Ann Arbor MI 48104.

I am sorting through the records that remain after our donation to the Bentley Library so your donation will be organized into region, state and district records. Donations of pins, banners and other memorabilia are also requested. Happy cleaning!

Editors note:

Who knows, you might find a treasure like that I found in my closet. (Pictured at right). Here are a few items from our 1986 meeting program:

- Student rooms in the hotel were \$15 per person.
- Member daily registration was \$20.
- "Please refrain from smoking in all education sessions. Smoking locations will be provided outside lecture rooms"
- \$50 prize drawing for those who pre-register
- Lunch Presentation "Alternatives to a 12 Month Clinical Rotation"
- Dupont ACA Workshop



American Society for Clinical Laboratory Science



Paul Guthrie ASCLS-MI *Newslinks* Editor 1506 Bacon Avenue Portage, MI 49002-7166

Moving? Please forward new address to the *Newslinks* Editor



MARK YOUR CALENDARS FOR OUR 2020MEETING IN KALAMAZOO!

APRIL 15-17 2020