

# **NEWSLINKS**

JANUARY/FEBRUARY 2021

AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE - MICHIGAN

**VOLUME 33 NUMBER 1** 

## President's Message - John Ko



Greetings and Happy New Year! I hope that you are all safe and staying warm.

I am sure you would agree that most of 2020 was a time of disruption and uncertainty. But as 2020 comes to an end and we look forward to and welcome 2021, I am reminded of Gandhi's quote: "Be the change you wish to see in the world." Although these were not his exact words, this brief phrase reminds us to reflect on ourselves and to transform our mindset and perspective.

This month, to promote diversity and inclusion, the Diversity Advocacy Council (DAC) will be launching PRISM: Pride – Respect – Inclusion –

Support – Momentum. The events planned will spark an opportunity for us to examine ourselves and understand our impact in promoting diversity. Diversity is more than gender, race, or religion. Rather, it is an understanding of how these differences can cultivate a practice of respect and care in our own environments.

Providing quality and accurate results for our patients is at the heart of every laboratory professional. But do we encourage and demonstrate civility and respect within our own teams? This change and new perspective will begin within our own laboratories and classrooms when we take the time to listen and understand ourselves and our peers. When we exercise this principle, we are fulfilling one of our organization's core values: "Promoting diversity supports the delivery of quality laboratory service."

Each path we take this new year will present us with an opportunity and a challenge to think diversely. I encourage you to participate in this year's PRISM activities so that we can be equipped and ready to accept this challenge.



- **Jan 13**: Participate in the Virtual Book Club
- Jan 14: Health Disparities presented by Dr. Robin Eubanks and town hall discussion
- January 18: Candid Conversations with Dr. Glenda Price, first African American president of ASCLS



Path at Dow Gardens in Midland, Michigan

Again, thank you for your continued dedication and commitment to our profession. I hope that this new year will bring you joy and inspiration. **Happy New Year and #LiveLoveLab #ASCLS.** 

Inside This Edition: Seeking a Historian	Page 2	President's Message Scientific Assembly: POC	Page 1 Pages 3-4
Scientific Assembly: Phlebotomy	Pages 5-6	PRISM -Glenda Price Award	Page 7-8

## **ASCLS-MI is Looking for a New Historian**

Suzanne Butch

Are you interested in history and think that we need to learn from the past? Do you wonder about the origins of ASCLS-MI? If so, consider being the next ASCLS-MI Historian. Your current historian has plans to move out of state.

Along with the responsibilities of arranging for a historical exhibit or event that features ASCLS-MI history at our Annual Meeting is the management of records that have not been sent to the Bentley Historical Library. Currently there are 5 plastic bins of materials. These include flags, pins, proclamations and the like.

If interested, contact John Ko. <u>Jjk889@gmail.com</u>

For questions, contact Suzanne Butch. <a href="mailto:suzanne.butch@gmail.com">suzanne.butch@gmail.com</a>



## **ASCLS-Michigan** Newslinks

A bi-monthly publication of the American Society for Clinical Laboratory Science - Michigan. Deadlines for articles are the 20th of Feb, Apr, Jun, Aug, Oct, & Dec. Articles must have name of author. Anonymous letters will not be published. The editor reserves the right to edit all materials submitted for publication. Articles appearing in *Newslinks* represent the opinion of the author and may not represent the opinion of the society.

**Membership**: Join ASCLS-Michigan by visiting the ASCLS web site: www.ascls.org/membership/app.pdf

#### **Non-Member Subscriptions**

(\$10 annually) should be made payable to ASCLS-Michigan and sent to:

ASCLS MI Treasurer 5363 Drumheller Road Bath, MI 48808 **Advertising:** Reach hundreds of Clinical Laboratory Scientists and students! Advertising rates per issue:

Business Card (or 5 lines): \$25 1/4 Page Ad: \$50 1/2 Page Ad: \$100 Full Page Ad: \$200

ASCLS-MI Districts & Committees: no fee for announcements, ads or any other relevant and necessary forms of information. 10% discount for ASCLS members.

### ASCLS-MI Leadership: Visit our web site at www.ascls-michigan.org

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



## SARS-COV-2 (COVID-19) Detection in the Point of Care

Nick Wesener MLS(ASCP)<sup>CM</sup>, Scientific Assembly, POC

COVID-19 testing has been the focus of the 2020, especially for many Point of Care (POC) departments. The SARS-COV-2 virus has affected everyday life, increased the burden on laboratories to maintain staffing, while adding thousands of new COVID tests per week in some cases. Due to the amount of requests for COVID testing, laboratories have had to reallocate staff from other areas in an attempt to meet the demand. A decrease in staffing along with the increased test volume is the perfect recipe for testing errors and technologist burnout.

Manufacturers of COVID analyzers and reagents are struggling to supply customers with the necessary testing resources. Pooling of patient samples to conserve reagent has become common practice in many laboratories. Typically, 3-5 patient samples are mixed together using the same amount of reagent used for 1 patient test. If all patient results are negative, then all of the patients can be reported as such. If the pooled sample is positive, then all of patient samples must be repeated and tested individually. The reagent shortages have played a major role in hospitals offering multiple testing platforms. Each new platform offered requires new training, documentation (e.g. procedures, job-aids), and validation. It can take weeks before implementing a new testing platform, especially if the device is to be interfaced.

In an effort to relieve the central laboratory of this testing load, many hospitals have looked toward implementing COVID POC testing. Certain patients require a faster TAT that can be provided by POC instrumentation. Emergency departments are busting at the seams, and the need to quickly determine a patient's COVID infection status to optimized patient throughput is more important than ever. Transplant recipient patients have been found to have a high morbidity rate if positive for COVID. Therefore, they must be tested the day of

receiving the organ. If the transplant patient is not able to get a COVID test performed, then the organ could potentially go to another patient. Others patients that can benefit from a POC COVID test are those that live in rural areas, having to travel the day of their surgery or procedure. Knowing a patient's test result that is undergoing a procedure can help care providers determine whether they can proceed with surgery or if extra personal protective equipment(PPE) is necessary. Fortunately, there are quite a few POC COVID analyzers available due to many receiving Emergency Uses Authorization (EUAs) from the FDA. Below is a sampling of instruments/tests systems that are available on the market. This is not an exhaustive list, nor are any being purposely excluded or included.

The Abbott ID NOW is the fastest waived COVID-19 POC test available on the market today. The ID NOW is able to detect a COVID positive patient in as little as 5 minutes, and a determine a negative result in 13 minutes. It utilizes an isothermal RNA amplification technique, fluorescentl—labeled molecular markers that bind to the replicated target RNA. The analyzer will determine if the sample is positive for COVID-19 based off the amount of fluorescence in the sample. The instrument differs from other nucleic amplification techniques used because it remains at a constant temperature during the amplification process, as opposed to heating and cooling the sample.

Early on there was substantial concerns about the accuracy of the ID NOW, enough to where the FDA had a news release sent to public in May, 2020. Abbott continued to collect more data during the pandemic, currently the manufacturer quotes analyzer specifications at around 95% sensitivity, 98% specificity in people within 7 days' post symptoms onset. Other studies performed from outside sources suggested sensitivity percentage

around mid-low 80s, but according to Abbott the studies consisted of patients that did not meet their testing criteria. Overall, the analyzer does have an intuitive user interface with a few procedural steps and performs well when testing symptomatic patients.



Four Abbott ID-NOW analyzers

Cepheid offers a COVID-19 molecular POC assay that can be tested using either their GeneXpert (Non-waived) or GeneXpert Xpress (Waived) instrument model. The actual testing process is identical between the two models; the Xpress gets its waived status via the device interface software which walks the device operator through each of the steps via on-screen instructions. Not too long ago these instruments mainly resided in the central laboratory, but now more and more hospitals are using them in the POC environment.

The GeneXpert is a single use cartridge assay, which reduces the potentiality for cross-contamination. The cartridge is the genius of this instrument, it contains all the necessary reagent for real-time PCR (polymerase chain reaction) testing. It separates the PCR reagent in chambers/tubes within the cartridge and uses a rotational plunger with an air cushion to combine reagents at appropriate times during the testing process. The GeneXpert targets two nucleic acids on the SARS-CoV-2 virus; the E and N2 gene. The device performs similarly to other PCR tests, with a sensitivity and specificity of >95% and a low level of detection (LOD). The test can be used on both asymptomatic and symptomatic patients, positive patients can be

detected in 30 minutes and a negative determined within 50 minutes. Cepheid no longer offers a COVID-19 only cartridge, but offers the testing in its new 4PLX cartridge format which detects COVID-19, influenza A & B, and RSV.

While purporting a lower sensitivity compared to molecular testing, antigen testing for COVID-19 has found a potential role in this pandemic. These immunoassays are mostly lateral flow assays that display a line for detection if the virus is present, depending on the manufacturer, the results are either read by the testing operator or a device. Due to the nature of the assays, these are more typical of POC testing. If the proper collection technique is used on symptomatic patients within 7 days of the onset of symptoms, results of 80-90 % sensitivity and specificity have been seen. Knowing this, antigen testing could be used to screen symptomatic patients and later confirmed by molecular testing.

The impact of the virus on day to day life may be dwindling with the approval and distribution of COVID-19 vaccines, there is a hope the vaccine will offer long-term immunity, but we won't know until more time passes after these initial vaccinations. The future demand for testing may not be what it is today, however continued testing for the virus will likely still be necessary. It is up to the laboratory to offer the most effective testing for each clinical situation whether that is the central laboratory or in the POC.

#### References:

- Pooled Sample Testing and Screening Testing for COVID-19. (2020, August 24). Retrieved December 20, 2020, from https://www.fda.gov/medicaldevices/coronavirus-covid-19-and-medical-devices/ pooled-sample-testing-and-screening-testingcovid-19#pooled
- An Update on Abbott's Work on COVID-19 Testing. (2020, August 14). Retrieved December 19, 2020, from https://www.abbott.com/corpnewsroom/ diagnostics-testing/an-update-on-abbotts-work-on-COVID-19-testing.html
- ID NOW COVID-19 Part Number #1900-000 24 Test Kit Laboratory Procedure [Package Insert]. (2020). 10 Southgate Road, Maine: Abbott Diagnostics Scarborough.
- 4. ID NOW COVID-19 Product Insert [Operator guide]. (2020). Scarborough, Maine: Abbott diagnostics Scarborough.
- 5. Xpert Xpress SARS-CoV-2 [Package Insert]. (2020). Sunnyvale, California: Cepheid.
- Drosten, C., & Croman, V. M. (2020, November 12).
   Comparison of seven commercial SARS-CoV-2 rapid Point-of-Care Antigen Tests [PDF]. Berlin: Charite-Universitätsmedizin Berlin.

# The Only Constant is Change

Jennifer Slater, B.S., Michigan Medicine Phlebotomy. Scientific Assembly Chair

As we usher in the New Year, it is a time to reflect on the past and look to the future. Of course, this year the focus for many is on the COVID-19 pandemic. Our personal and professional lives uprooted almost overnight, the future state still feeling a bit unknown. Laboratory personnel were called to action, navigating a year of rapidly changing workflows, PPE shortages, increases to testing requests and staffing challenges.

But our teams have persevered and this is not the first time we have adapted quickly and accepted change. In fact, that is part of our daily routine in healthcare, phlebotomy being no exception. In this time of reflection, it made me curious about the history of our Phlebotomy team. To gain some insight, I took the opportunity to talk with **Marie Moorhouse.** She joined the Michigan Medicine Phlebotomy Team in 1985 as a phlebotomist and is set to retire at the end of 2020 as the Lead Training Specialist.

Question (Q): What led you to Laboratory Science/Phlebotomy?

Marie (M): I graduated from college with a BS in Biology (Cell Physiology concentration) a minor in Chemistry and Psychology. My intent was to parlay this degree into a career as a researcher. I loved working in the lab during college and the thought of research intrigued me. It was by happenstance that I landed in phlebotomy after having met the phlebotomy supervisor at that time. What I thought would be an entry level introduction into the University of Michigan Health Systems turned out to be an awarding, 35-year career in Phlebotomy. It is the best career decision I NEVER made. This position changed my life. It was what I was meant to do.

Q: What is the biggest change you have seen in Phlebotomy?

M: The biggest change I have seen throughout my employment has been almost everything. When I started here at the U, we were an 8-hour a day



Marie Moorhouse, B.S., CPI

operation: 6 a.m. to 10 a.m. shift and a 3 p.m. to 7 p.m. shift. All changes were positive and for the betterment of everyone and everything.

Marie goes on to list some specifics, including but not limited to:

- Technology in the form of computers on wheels, paging, and implementation of several information systems
- Service expansion to timed draws, stat collections, indwelling catheters and an increase in bed capacity as she experienced the opening of University Hospital (1986), Cardiovascular Center (2007), Mott Children's Hospital and Von Voightlander Women's Hospital (2011).
- Safety enhancement related to needles, tourniquets, and comprehensive training plans

Q: What has remained the same? Does it surprise you?

M: What has remained the same is the level of care and commitment to excellence in service we were expected to present to our patients. We were always patient/customer focused and thrived to provide exceptional service. I had a humongous respect for the University of Michigan even prior to my employment so it does not surprise me at all that over the course of the years they have been able to maintain that same level of excellence in spite of all the changes. One thing I know for sure, we here at the University of Michigan are one resilient group of people.

Q: What is the biggest challenge you see facing phlebotomy today?

M: I would say the biggest challenge is having enough staff members to keep up with the draws each morning and still maintain the level of care, compassion, and proficiency needed to provide the type service I would like to see dedicated to our patients. Under the circumstances, however, I am extremely proud of our staff. I really don't know how they do it. I really do not. They are awesome and as soon as I think we are going under, our amazing staff, rights the ship. WE have the best staff ever. I'd put money on it. In spite of the challenges, they rise to the occasion.

Q: How have you learned to adapt your style over your 3+ decades?

M: I have learned to adapt to the many changes because I fell as long as it is change that will benefit our patients, our culture, and overall missions, visions and goals, it is worth adjusting for. I also strongly believe that just because I don't agree with something it does not make it wrong or invalidated. If it makes [sense] to somebody, and they are trying to evoke a positive change, I should at least keep an open mind and try it. Under most circumstance, it has turned out to be the right choice. I pride myself in being open minded and flexible so adjusting to changes has come easy. It has led to an awesome career thus far. I'm not saying I have always agreed but I have been able to put self aside and at least try it. I am a stickler for conformity so even when I didn't agree, I was able to support the idea and inforce the process with staff as if I wholeheartedly believed it. When you do that, you can appreciate the bigger picture even if you are not in the frame.

Q: Any words of wisdom for those considering a career in Phlebotomy/Laboratory Science?

M: My words of wisdom would be: "As you enter your work place every day, image the person you love the most in your life and then image that that is the person you are taking care of. Give your patient the same degree of patience, compassion, care, and respect, that you would want your loved one to receive. If this is your baseline, you will be successful. First learn to give of yourself then take care of others. If you can't do that, this is probably not the career for you.

This is just a snippet of the experience and wisdom Marie shared with those she encountered during her career. It is a welcomed reminder we are resilient, there are brighter days to come and Laboratory professionals play a vital role in the health of our nation. Thank you to all for your continued dedication, and best wishes to a Happy New Year!

Editors Note: Appreciation for the work of phlebotomists in our organizations is always appropriate. They do so much more than draw blood. They have been on the front-line of the pandemic in so many ways. As an addendum to the excellent article above, I am including a reference link to a trusted source for phlebotomy education and information. The Center for Phlebotomy Education is led by Dennis Ernst who has been a speaker at many of our past ASCLS-Michigan Annual Meetings. Visit <a href="www.phlebotomy.com">www.phlebotomy.com</a>





# Please Support the Glenda Price Diversity in Leadership Award Honor an ASCLS mentor with strong ties to Michigan

**Editors Note:** I recall attending a board meeting for MSCLS (our nomogram at the time) at Marygrove College in Detroit quite a few years ago. The event was hosted by Dr. Glenda Price. She was a memorable and impressive speaker. I was recently pleased to receive an email from ASCLS on a fundraiser to to create an award in her honor. Please consider supporting this effort as described later in this article.



I was also curious on the status of Marygrove College (pictured above). It closed last Fall due to financial pressures. It is encouraging to learn that the facility is not to be shuttered, and has a new lease on life. If interested, there is more information here: <a href="https://www.lincolninst.edu/publications/articles/big-plancampus">https://www.lincolninst.edu/publications/articles/big-plancampus</a>

#### **ASCLS Announcement:**

The ASCLS Diversity Advocacy Council (DAC) is hosting a fundraiser for the new Glenda Price Diversity in Leadership Award. This award honors Glenda Price, the first African American president of ASCLS (formerly ASMT), and was created to promote diversity and inclusion within the ASCLS Leadership Academy, and ultimately ASCLS. The fundraiser will take place during **PRISM**: **Pride** · **Respect** · **Inclusion** · **Support** · **Momentum**, **January 13-18, 2021**.



Dr Glenda Price

**Glenda Price** began her professional career as a cytotechnologist with a BS in Medical Technology from Temple University in Philadelphia where she would also later earn her MS and PhD. She began as faculty at Temple and rose to the position of Assistant Dean. She served in the same capacity later at University of Connecticut. She was Provost at Spelman College before becoming President of Marygrove College in Detroit, Michigan, from which she later retired. She did not stay retired long, as she opted to serve as President of the Detroit Public Schools Foundation and in various other roles in non-profits in and around the State of Michigan.

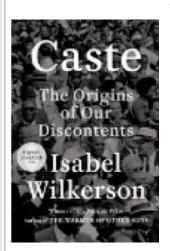
Glenda was considered a very inspiring mentor and leader to many. She was often the first African American or first women (and sometimes both) to hold a variety of leadership positions throughout ASCLS and academia. Some who knew her would say she was a trailblazer who spoke quietly, with honesty and measured words and tones.

## **Every donation counts!** You can help in three ways

- **Donate money** directly to the Glenda Price scholarship. Text PRISM21 to 76278. You will be prompted to give contact information and then directed to a web page to enter your donation.
- **Donate an item** to be included in the online fundraising event. Examples of items to donate include gift baskets/boxes that represent the diversity in your area; jewelry; and food that highlights your culture. Donated items will be accepted December 30-January 14. It is very easy to donate an item: just register at this link: <a href="ASCLS PRISM21">ASCLS PRISM21</a> | Powered By GiveSmart to donate an item and/or bid on an item. The donor will receive a receipt for the item and will also be responsible for the shipping cost to the winner.
- **Bid on an item** in the silent auction. Bidding will occur during the entire week of the PRISM event, and participants will be notified via text if they are outbid on an item. Register at <a href="www.PRISM21.givesmart.com">www.PRISM21.givesmart.com</a> to bid on an item. Bidding will end on January 18 at 6 pm EST.

#### Other PRISM Opportunities are listed below. To learn more <u>click here for the ASCLS website</u>

Participate in the Virtual Book Club—Start Reading Caste



PRISM will kick off with a Virtual Book Club on January 13. Read the #1 New York Times Bestseller and Oprah Book Club pick, Caste: The Origins of Our Discontents by Pulitzer Prize-winning author Isabel Wilkerson. "As we go about our daily lives, caste is the wordless usher in a darkened theater, flashlight cast down in the aisles, guiding us to our assigned seats for a performance. The hierarchy of caste is not about feelings or morality. It is about power—which groups have it and which do not." You can find the book on Amazon and Barnes&Noble or most major retailers. Stay tuned for times and details for virtual discussions.

#### Save the Dates for Additional PRISM Activities

- January 14, 7 pm EST, Health Disparities with Dr. Robin L. Eubanks, associate professor at Rutgers University Biomedical and Health Sciences School of Health Professions in the Department of Interdisciplinary Studies. Dr. Eubanks will give a brief overview on health disparities and cultural humility. The overview will be followed by a town hall style discussion.
- January 18, 7 pm EST Candid Conversations: Glenda Price. Cheryl Caskey, past president of ASCLS, will interview Glenda Price, first African American president of ASCLS.



## 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



Visit
www.asclsmichigan.org