

#### **NEWSLINKS**

JANUARY/FEBRUARY 2019

AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE - MICHIGAN

**VOLUME 31 NUMBER 1** 



## President's Message Jerry Singleterry

The New Year 2019 is here. WOW how time can fly by when we have so much going on in our lives. Take a moment to give thanks to those that offered you support over the past year. I would like to personally thank you, my ASCLS family, for your continued support of the society.

As we begin the New Year, I am reminded how fast it will roll by, and soon the 2019 year will end too. The ASCLS is busy with preparations for the future. In April 2019, ASCLS-Michigan will host the annual conference in East Lansing. The annual ASCLS conference will take place early this year: June 23-27, 2019 in Charlotte, North Carolina, and promises to be a "whole new experience". The 2020 CLEC team is hard at work planning for CLEC to visit Michigan: date to be announced soon.

The New Year would not be complete without reflection. I would like to reflect on interpersonal relationships, especially when interacting as a team at work. I believe we represent our profession in every interaction and working in the modern laboratory can be stressful. Bench work is multidimensional and requires respect on so many levels. It is easy to

become stressed with different things imploding around you (like a down instrument, a fellow coworker call in, and the provider demanding results on their patient).

I believe we can learn from these stressors and do what laboratorians do best: prioritize. Take a deep breath and move from the most critical and see if it can be solved or rectified. Then move to the next. Keep in mind that if a situation is not easily solved, try to find out why (the root cause). These are the answers you need to help develop a process to prevent or manage those difficult situations.

If you find yourself overly stressed and unfocused, take a step back and reach out to those you can depend on: a fellow coworker or mentor. The laboratory world is filled with problem solvers. Get to know your laboratory team. Take time to build relationships, trust and respect with others. The last thing you want to do is alienate members of your team.

Stressful work situations can be a challenge and I have witnessed how these relationships can become strained and form wedges. These wedges become obstacles to our interactions. Maintaining professionalism can help overcome these wedges. It starts with good interpersonal relationships. Try to extend the most favorable interpretation of your coworkers words and actions. It may be the downed instrument talking, not your co-worker.

Breathe in the New Year. Support the team around you and they will support you. I look forward to working with you in the coming year. I know we can do great things together.

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**Click here to view Andrews MLS Web Site** 

Click here to view video on the MLS program



American
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Science
Michigan

#### 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

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

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**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.

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#### **Vasculitis and Laboratory Testing**

Paul Guthrie, Chemistry Scientific Assembly

The laboratory where I work recently installed a BioRad BioPlex 2200 analyzer. The test menu implemented includes testing that had been sent to a reference lab. Some of the tests in that menu were new to me. I'm fairly certain they were not performed or taught when I was at university in the early 1980's, nor have I attended CE on the topic. This article gives an overview of three of the tests: Myeloperoxidase Antibody (MPO), Proteinase 3 Antibody (PR3) and Glomerular Basement Membrane Antibody (GBM) as well as a brief introduction to the diseases that comprise the "vasculitides" (plural of vasculitis).

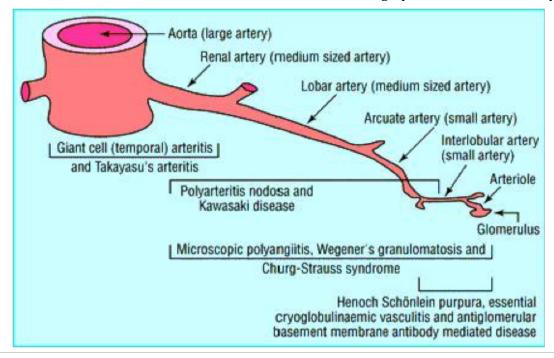
#### The Diseases

Vasculitis refers to a group of conditions characterized by **inflammation of blood vessels**. Most commonly, in the absence of an identifiable cause, it is called primary vasculitis. When an underlying cause can be identified, it is called

secondary vasculitis. Secondary vasculitis may be triggered by an allergic reaction to a medication, in response to an infection such as hepatitis C, or as a result of an autoimmune disease, such as rheumatoid arthritis. In some cases, secondary vasculitis is seen as a complication of blood cell cancers such as leukemia and lymphoma.<sup>1</sup>

Vasculitis can affect any type of blood vessel, including veins, arteries, and capillaries. It can result in narrowed or blocked vessels that limit the circulation of blood, leading to tissue or organ damage. The diseases present with diverse clinical features and are often rapidly progressive, causing irreversible injury to the vessels of the organs affected, such as the kidneys and lungs

There are many types of vasculitis, which are often classified according to the size of the affected blood vessels. The graphic below<sup>2</sup> shows the types of



vessels affected and some of the disease names. A listing and description of 15 vasculitides can be found at the Vasculitis Foundation web site: <a href="https://www.vasculitisfoundation.org/education/">https://www.vasculitisfoundation.org/education/</a>

Conditions associated with three of these diseases are listed below:

- Granulomatosis with polyangiitis (GPA), formerly/also called Wegener's Granulomatosis (WG), can be systemic; the effect of inflammation can be present in the entire body. It affects the upper (sinuses and nose), and lower (lungs), respiratory system and frequently involves the kidneys, lungs, eyes, ears, throat, skin and other body organs. For unclear reasons, blood vessels in affected areas may become inflamed, and clusters of certain cells (granulomas) may occur. Patients who do not have involvement of the kidney, brain or gut are said to have Limited GPA. However, using the term "limited" has become unpopular because certain forms of the illness may still be very serious even though these other organs are not involved.
- Microscopic polyangiitis (MPA) is a small vessel vasculitis which primarily affects the arterioles (small arteries), capillaries and venules (small veins). This condition can affect many organ systems in the body including the skin, nerves, lungs gastrointestinal system, lungs and joints.
- Goodpasture's Syndrome has vascular inflammatory involvement of lungs and kidneys, the so-called pulmonary-renal syndrome. This can include bleeding in the lungs (hemoptysis) that can lead to respiratory failure and bleeding in the kidney (hematuria) that can lead to rapidly progressive loss of kidney function.

Treatment for vasculitis depends on the severity of the disease, organ systems that are involved and the clinical situation. Medications include immune-suppressives like prednisone often in combination with other medications like cyclophosphamide, methotrexate, azathioprine or mycophenolate mofetil. Recently, the monoclonal antibody drug Rituxan (rituximab) was found to be an effective treatment of some of these diseases.

#### The Laboratory Tests

The presence of ANCA (anti-neutrophil cytoplasmic antibodies) in patients with vasculitis was first observed by Davies in 1982.<sup>3</sup> ANCA are autoantibodies with specificities for proteins located in the primary and secondary granules of neutrophils and in the peroxidase-positive lysosomes of peripheral blood monocytes. They can be detected by

indirect immunofluorescence (IFA) on ethanol-fixed neutrophils, producing characteristic staining patterns with accentuation of the fluorescent activity within the cytoplasm. Two major patterns of immunofluorescent staining have been observed – a classical or cytoplasmic staining, designated cANCA, and a perinuclear pattern, designated pANCA. Other staining patterns have been described and are generally noted as atypical.<sup>4</sup>

Immunoassays have been developed to detect specific antibodies causing the various IFA patterns. Three of those tests are Myeloperoxidase Antibody (MP), Proteinase 3 Antibody (PR3) and Glomerular Basement Membrane Antibody (GBM). These are the three new tests that we are performing on our BioPlex 2200 analyzer. <sup>5</sup>

- Autoantibodies to PR3 occur in patients with Wegner's Granulomatosis (WG); both classical WG and WG with limited end-organ involvement, and produce a characteristic pattern of granular cytoplasmic fluorescence on ethanol-fixed neutrophils called the cANCA pattern.
- Autoantibodies to MPO occur predominately in patients with Microscopic Polyangitis (MPA) and produce a pattern of perinuclear cytoplasmic fluorescence on ethanol-fixed neutrophils called the pANCA pattern.
- Autoantibodies to GBM occur predominantly in patients with Goodpasture's syndrome. These patients may or may not have positive ANCA titers.

The serological tests noted above are only a part of the diagnostic tools needed to diagnose a specific vasculitis. Tissue biopsy is often a confirmatory procedure. Depending on the history, signs and symptoms additional laboratory or imaging studies may be performed.

#### References

- 1. Lab Tests Online, American Association of Clinical Chemistry, and collaborating partner ASCLS www.labtestsonline.org
- 2. Vasculitis Foundation web site www.vasculitisfoundation.org
- 3. DJ Davies, JE Moran, JF Mial and GB Ryan. Segmental necrotizing glomerulonephritis with antineutrophil antibody Br Med J 1982; 285: 606.
- 4. Mayo Medical Laboratories online catalog www.mayomedicallaboratories.com
- 5. Bio-Rad Bioplex 2200 Vasculitis reagent kit package insert, Clinical Diagnostics Group, 4000 Alfred Nobel Drive, Hercules, CA 94547

## SAVE the DATE

APRIL 10-12, 2019
KELLOGG CENTER
EAST LANSING, MI
ANNUAL
CONFERENCE



#### 2019 IS PAPERLESS! (SORT OF)

This year ASCLS-MI members will not be receiving a full conference brochure in the postal mail. Instead, members will receive smaller mailings and e-mails with information about how to find the full program on the Society website. Look for postcards, fliers, and e-mails in the months leading up to the April 10-12 conference at the Kellogg Center in East Lansing. Mark your calendar now!







#### **ASCLS Michigan Awards and Scholarships**

With the new year upon us, let's start nominating! Let's celebrate all of our hard-working individuals who go out of their way every day to make a difference. Is there someone you know who is an exceptional professional that deserves recognition? Does this person go above and beyond every day for patients, students, and other professionals? This celebration of the profession is a time to showcase what being a medical laboratory scientist is all about. If you would like to recognize an individual who is fully dedicated to this profession and constantly displays passion, devotion, innovation and makes a difference in this field; please nominate them for a well-deserved award. Your nomination is vital and significant!

Scholarships and awards require completion of an awards application and may require a nomination letter.

For other requirements and information, please visit: <a href="http://www.ascls-michigan.org/awards">http://www.ascls-michigan.org/awards</a>

PLEASE SUBMIT ALL AWARDS AND SCHOLARSHIPS NOMINATIONS/APPLICATIONS TO ALICIA KUZIA akuzia@med.umich.edu OR NICOLE EADEH niea@med.umich.edu

UNLESS OTHERWISE NOTED\* DUE DATE IS January 15th, 2019

#### **NOMINATE NOW!**

#### **AWARDS**

#### **ASCLS-Michigan Member of the Year**

Recognizes individuals who have significantly contributed to the mission and goals of the society. Formerly known as CLS of the Year. A letter of nomination is required.

Eligibility: The recipient must be active in professional, civic, and non-professional activities of the society. The recipient will be recognized during the ASCLS-MI awards ceremony and at the national ASCLS annual meeting in Charlotte, NC.

Nomination Information: <a href="http://www.ascls-michigan.org/member-of-the-year/">http://www.ascls-michigan.org/member-of-the-year/</a>

#### **Donna Duberg Mentorship Award**

This award has been in existence since 1990! The purpose of this award is to honor a person who exemplifies characteristics of mentorship in ASCLS, including the ability to guide other in our profession and enlighten them in our professional society of ASCLS.

Eligibility: Recipient is chosen by a vote of the past five award recipients. Mentorship must take place within the organization.

Nomination Information: <a href="http://www.ascls-michigan.org/donna-duberg-mentorship/">http://www.ascls-michigan.org/donna-duberg-mentorship/</a>

#### Lifetime Achievement Award

This pristine award honors a member who has excelled in the profession, helped advance education, and has set the standard of excellence in the society of ASCLS. Previous recipients of the award include; Linda Goossen (2018), Deanna Klosinki (2017), Lynne Williams (2016), Roslyn McQueen (2015) and Suzanne Butch (2014).

Eligibility: Evidence of advancing, promoting, and improving the profession. Living during submission of the application, however does not need to currently be active in the profession. No self-nominations allowed, needs at least 20 years in the profession or ASCLS.

Nomination Information: <a href="http://www.ascls-michigan.org/lifetime-achievement/">http://www.ascls-michigan.org/lifetime-achievement/</a>

#### **Martha Roulund Award**

Named after Martha Roulund, a strong student supporter, this award honors student who is becoming a first-year professional member. This student shows great potential contributing to the profession and our professional society.

Eligibility: Nominees will be submitted by education coordinators and ASCLS board members. The awards committee will establish selection criteria and determine the number of recipients based on budget. Student must be becoming a FYP in the next membership cycle.

Nomination Information: <a href="http://www.ascls-michigan.org/martha-roulund/">http://www.ascls-michigan.org/martha-roulund/</a>

#### **Pam Agren Inspiration Award**

Honoring the memory of Pamela K. Agren, this award began in 1999 to recognize the "behind the scenes" activities of a person who greatly benefits the society. This person may not always receive the recognition, but ASCLS-MI would not be able to do it without them.

Eligibility: Recipient is chosen by vote of the past 5 recipients and is actively involved behind the scenes. Nomination letter is required.

Nomination Information: <a href="http://www.ascls-michigan.org/pam-agren-inspirational/">http://www.ascls-michigan.org/pam-agren-inspirational/</a>

#### Scientific/Technical/Literature Research Award

This award recognizes the project development contributions made in the technical, education, and management aspects of the laboratory.

Eligibility: Any current ASCLS-Michigan member (including students) who have developed a project, developing a new assay, original education software, analyzing management problems, etc.

Nomination Information: <a href="http://www.ascls-michigan.org/new-page/">http://www.ascls-michigan.org/new-page/</a>

#### **Clinical Poster**

This award highlights projects, cases, studies, etc. completed by undergraduate or graduate MLS professionals. These projects showcase the various different laboratory disciplines. Guidelines and the

application can be found: <a href="http://www.ascls-michigan.org/2019-meeting/">http://www.ascls-michigan.org/2019-meeting/</a>

Eligibility: Undergraduate of graduate MLS professionals. 50 % of the group must be ASCLS-Michigan members.

For more information: <a href="http://www.ascls-michigan.org/clinical-poster/">http://www.ascls-michigan.org/clinical-poster/</a>

#### **ASCLS Michigan Board Appreciation**

Eligibility: Non-member (e.g. pathologist, other laboratorians, vendors, institutions, etc.) who has contributed significantly to the profession and/or society.

\*RECIPIENT VOTED FOR AT THE JANUARY BOARD OF DIRECTORS MEETING. SUBMIT NOMINATION NO LATER THAN JANUARY 15.

Please get more information here: <a href="http://www.ascls-michigan.org/ascls-michigan-board-appreciation/">http://www.ascls-michigan.org/ascls-michigan-board-appreciation/</a>

#### **SCHOLARSHIPS**

NOTE: Scholarship Nomination Deadline is different than for awards. It is February 1, 2019

#### Joseph Miller Memorial Scholarship

Eligibility: An outstanding medical laboratory science student completing their clinical internship in the calendar year in which the award is presented. Recipient will receive a certificate along with a monetary gift determined by funds available.

Please nominate here: <a href="http://www.ascls-michigan.org/scholarships">http://www.ascls-michigan.org/scholarships</a>

#### **Student Forum Scholarship**

Eligibility: Juniors or seniors in an MLS program, or MLT students, who are ASCLS-MI members in good standing, who register for and attend the ASCLS-MI state meeting.

Three scholarship recipients are selected (1st=\$300, 2nd=\$200, 3rd=\$100).

Please nominate here: <a href="http://www.ascls-michigan.org/scholarships">http://www.ascls-michigan.org/scholarships</a>



### **ASCLS Michigan Board of Directors**

#### Nominate and Volunteer to Better Your Profession

Have you thought about becoming more involved with ASCLS-MI, but not sure how? Do you want to develop your leadership skills, be able to network closely with other ASCLS-MI members, or make an impact on your profession?

Consider running for an elected position for ASCLS Michigan's Board of Directors. Being a part of the Board of Directors gives you the opportunity to promote the medical laboratory science profession, engage our organization's members, and develop leadership skills.

The Board of Directors is an elected volunteer group of professionals within the state organization that have various medical laboratory science backgrounds. Their roles include promoting membership activities and communicating organization updates to our membership community at large.

If you are interested in becoming involved, check out the open positions below. You can also learn more on the ASCLS Michigan <u>Elected Positions Webpage</u>

- President Elect 1 year term (3 year commitment)
- Secretary– 1 year term
- District Representative 1 year term, 3 representatives per district (see <u>ASCLS Michigan Bylaws</u> Article VIII for listing of District boundaries by county)
- New Professional New Member 1 vear term
- Nominations Committee 2 year term, 2 open positions
- Government Affairs 2 year term

If you would like to serve on the BOD, know someone you would like to nominate for a position, or have questions about a position, please contact one of the Nomination Committee members or submit a <a href="Nomination Form">Nomination Form</a> to a committee member.

Becky Potter: rebecca.korbely@gmail.com

Renee Sutton: reneesutton00@gmail.com

Kristin Landis-Piwowar: landispi@oakland.edu

Lily Scholl: <a href="mailto:schollli@gvsu.edu">scholli@gvsu.edu</a>

Nominations must be submitted to the Committee by February 23, 2019

American Society for Clinical Laboratory Science MICHIGAN



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 ASCLS-MICHIGAN ANNUAL MEETING & EXHIBITS APRIL 10-12, 2019 KELLOGG HOTEL & CONFERENCE CENTER, MICHIGAN STATE UNIVERSITY, EAST LANSING IT'S IN YOUR BLOOD!