We hope that your summer season is bringing you a myriad of opportunities for fun, relaxation, and recharging of oneself with your loved ones; however, mid-summer seems to turn into early fall with busy personal and professional schedules in the blink of an eye.

This November, the American Society of Cytopathology (ASC) and International Academy of Cytology (IAC) are teaming up to organize a joint meeting of the 21st International Congress of Cytology (ICC) and the ASC’s 70th Annual Scientific Meeting from November 15-20 at the Hilton Baltimore Inner Harbor, Baltimore, Maryland, USA. The meeting is planned to offer the best from the two major cytopathology organizations in the world.

Regardless of the stage in your career in cytopathology, continuing education plays a pivotal role in the lifecycle of cytopathology professional. We know in our hearts that you are ready, as we are, for the cutting-edge and exciting new learning and networking opportunities at this mega-cytopathology-focused educational event.

Check out the following reasons to clear your calendars to join us in Baltimore.
**Educational Sessions:** The Scientific Program Committees of both ASC and IAC have volunteered countless hours to put together a superlative scientific program. In addition, to the showstoppers, such as the Papanicolaou Address and Awards, Diagnostic Cytology Seminar, Koss Lecture, IAC lecture, State of the Art Symposium, and New Frontiers Lecture, we will also feature a variety of innovative symposia which will focus on the existing and the new reporting systems in cytopathology, targeted topic-based workshops, video microscopy tutorials, and meet-the-professor sessions. You will be able to draw on the experience and engage with our program faculty, who are at the forefront of cytopathology and will present the latest advances, current perspectives, and critical issues in the field.

**Opportunities for Trainees and Early-Career Cytopathology Professionals:** The Scientific program committees have prioritized speaking opportunities for cytopathology professionals at all career stages. The abstract platform and poster presentation sessions, in particular, will feature presentations from trainees and early-career cytopathology professionals.

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**Use your Membership Benefits!**

As a member you enjoy FREE credits on select ASC educational activities like Case Studies and eJournals!

Not a member? JOIN NOW!

**Case Studies**

1 CME/CMLE

Case Studies provide an interactive distance-learning experience to interesting cases in the field of cytopathology. Each Case includes objectives, images, a clinical history, along with a multiple-choice diagnosis followed by discussion, review images and references.

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**eJournal**

1 CME/CMLE each

The eJournal, an online pathology journal club, reviews the most current literature in cytopathology by today’s foremost experts. You can view an article from a recent issue of respected peer-review journals, and review the article's key points and clinical implications.

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As a Member, you also receive reduced rates on select educational activities.

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**Click here to view additional Educational Activities**
Networking and Building Collaborations: Educational conferences are the perfect venue for networking and pursuing collaborators and mentors. With this in mind, we are promoting opportunities to network and mingle through poster sessions, exhibit hall, and organized lunches and social events. These will allow ample time to foster new and energize existing professional relationships.

Let’s be Social, Cytology Merry, and enjoy Baltimore: With the pandemic in the rear-view mirror and still looming somewhere nationally and internationally, nobody is taking November 15-20, 2022, for granted. With the success of the 2021 ASC meeting in Las Vegas after the absence of an in-person 2020 meeting, social gatherings with new acquaintances and reunions with longtime friends are essential. There are few better places to meet your cytology family than Baltimore. A few highlights of Baltimore (nicknamed the “charm city”) are the exciting inner harbor, Fell’s Point, Baltimore Museum of Art, the Walters Art Gallery, National Aquarium, Maryland Zoo, and many more attractions in nearby Washington, D.C. We are also excited about the meeting venue, the Hilton Baltimore Inner Harbor adjacent to Oriole Park at Camden Yards, a stone’s throw from the Inner Harbor area, and its award-winning restaurant scene. If you are unable to attend the live meeting, you will not need to worry. Symposium sessions will be available for purchase on the ASC CytoCE Center site in December.

We want you to join us and celebrate the international cytology family and the profession. Both ASC and IAC have carefully considered our path forward in designing this meeting titled “Next Generation Cytology” with a keen focus on our mission: our commitment to Diversity, Equity and Inclusion, Education, Patient Safety, and responsibilities to “The Profession of Cytopathology and above all “You.”

We sincerely hope you will join us in November, in-person, and we look forward to welcoming you in Baltimore soon!
21st International Congress of Cytology held jointly with the American Society of Cytopathology's 70th Annual Scientific Meeting

Important Dates You Need to Know

November 15-20, 2022
Baltimore, MD, USA

To listen to the ASC Podcast go to podbean.com and search for CytopathPod
Time:
3:00 PM (ET)
Fourth Tuesday of each month.
(December Webinar is the second Tuesday)

Credits:
2 CME/CMLE Credits per webinar

See pricing options for the 2022-2023 Series.

You have the choice of individual or institution pricing.

- Get more! Purchase any live webinar and you will have access to the archived webinar.
- Convenient. Webinars can be viewed live or archived. Earning 2 CME/CMLE/SAM credits has never been easier.
- Interactive. Engage with leading physicians and cytotechnologists through live Q&A sessions and audience polling.
- Learn from leading experts on a variety of cytopathology topics.

Click her for more information and Pricing
Baltimore in a word is WONDERFUL From the vantage point of Dotty Rosenthal

My husband and I came to Baltimore in 1994, much to the dismay of our friends and family in LA. They couldn’t believe we could be so crazy as to leave California, especially Los Angeles. We were also a bit anxious about what we would find here, besides Johns Hopkins Hospital.

Over the subsequent years, we have found this to be an accessible, energetic, and dynamic city, one that we plan to live in for the rest of our lives. Why?

- Cultural Institutions and the traditions that have nurtured them
- Diversity of ethnicities, ideologies, educational opportunities and barriers
- Dedication of individuals who fervently believe that one person can make a difference, and who act upon that belief.
- Recognition of the City’s problems, especially crime, financial and health inequities, and the determination to fix them.
- Incomparable medical care and excellent academic institutions

The URLs for each entry will give you more information, as well as the City Guides that we will have at the registration desk. The online directory is comprehensive, a good way to plan your visit in advance. https://baltimore.org/visitor-guide/

Don’t forget that the District of Columbia (aka The District, DC, Washington DC, Our Nation’s Capitol) is a short drive or metro ride away. Many wonderful sites to see there. https://washington.org/visitors-guide

I now share with you my favorite places and activities in Charm City. But you have to promise me that you’ll go to some of the meeting!

Museums

American Visionary Art Museum (AVAM) – Founded in 1995 by Rebecca Hoffberger, herself a visionary, AVAM highlights art produced by people whose intent was self-expression, usually to fill an emotional need rather than to perform as an “artist”. The biographies that accompany each work are as intriguing as the works themselves. The materials that form the works are often foraged from the environment, e.g., threads from clothing, toothpicks or popsicle sticks, organic matter from plants. The gift shop is an experience in itself, so be prepared to bring an extra suitcase and do your holiday shopping there.

800 Key Hwy, Baltimore 21230  410-244-1900  www.AVAM.org

Baltimore Art Museum (BMA) – adjacent to the Johns Hopkins University Campus, these two entities are worth at least a half-day excursion. The BMA has extensive African and Native American collections. Indisputably, the Crown Jewel is the Cone Collection of more than 600 works by Matisse, the largest in any one museum, as well as other impressionists. The Cone sisters, one of whom was a pathologist, hated Baltimore, so with their family money they spent most of their time in Paris. As friends of Gertrude Stein, they spent many evenings in Stein’s home, where they met the most notable artists of the era. As we all know, artists “will work for food”. The young artists, soon to be great, were grateful to exchange their works for subsistence funds. The sisters bequeathed their collection to the BMA where it is proudly displayed along with a diorama of the sisters’ home in Baltimore.

10 Art Museum Dr., Baltimore 21218  443-573-1700   www.ARTbma.org

Gertrude’s Restaurant is within the BMA. There you can savor “low country” Southern cooking, including fabulous crab cakes, the signature dish in many Baltimore restaurants. www.Gertrudesbaltimore.com
Homewood House – on the Johns Hopkins University campus, it is the purest extant example of Federalist Architecture in America, meticulously maintained with its authentic furnishings and decor. Docent tours are available and delightful. www.museums.jhu.edu/homewood-museum/

Baltimore Museum of Industry – Baltimore was at the forefront of the Industrial Revolution. Many refugees who emigrated from Europe in the 19th century found work in factories. The museum displays original equipment from those manufacturing plants, and tells the stories of the people who toiled and were exploited there. Many of their families still live in the Baltimore area. Some of the exhibits are interactive.
1415 Key Highway, Baltimore 21230  410-727-4808   www.thebmi.org

Baltimore and Ohio Railroad Museum – Baltimore is often referred to as The City of Firsts. The B&O Railroad was the first railroad in America. The museum is in the Round House. Engines, freight and passenger cars, as well as videos of important events, including political campaigns and train wrecks, illustrate the History of Railroading in the US. There are also model railroad collections that are fabulous, especially if such are among your fondest childhood memories.
901 W. Pratt St.  Baltimore 21223    410-752-2490   www.BOrail.org

Fort McHenry – One of America’s National Parks, the fort is maintained as it was when the battle of 1814 was fought in the Inner Harbor. The battle marked the defeat of the British after they burned the US Capitol. Francis Scott Key, overlooking the Harbor the next morning, wrote the words to our National Anthem after the battle had ended.

National Aquarium – In addition to the usual collection of aquatic creatures, this Aquarium focuses on preservation of the Chesapeake Bay, the largest estuary in the US. Permanent exhibits also include a Tropical Rain Forest, Northern Australian Water Gorge, and Indo-Pacific Reef.
501 E. Pratt St., Baltimore 21202   410-576-3800   www.aqua.org

Music

Baltimore Symphony Orchestra – Among the pre-eminent American orchestras, the BSO has claimed its place in the Firsts category. The first woman conductor of a major symphony orchestra, Marin Alsop. And now, currently the only black conductor of a major symphony, Jonathon Heyward (age 30) will begin as Music Director in the 2023-24 season on a 5-year contract. The BSO is a group of energetic, committed players who enthrall their audiences with classical and contemporary music, and bring their talents to children in inner city schools. Orchkids was begun by Maestra Alsop in 2008 in one inner-city school with 30 students. The players now work with over 1900 students in 10 schools. More advanced students occasionally perform with the BSO. For tickets – www.bsomusic.org  1212 Cathedral Street, Baltimore, 410-783-8000
Thursday, Nov. 17 @ 8 p.m., Joseph Meyerhoff Symphony Hall

The Fantastic Symphony
Witness the wonder of an orchestra pushed to the limits of sonic imagination when Berlioz transforms the symphony into a maniacal paean to obsessive love. Working in the same fantastical vein in our own century, the modern British legend Jonathan Harvey conjures a mystical world without suffering. Pianist Stewart Goodyear’s lightning-fast left hand and composer/conductor Matthias Pintscher’s perceptive leadership make a perfect pair in Ravel’s sizzling showcase for a war-scarred patron.

Artists
Matthias Pintscher, conductor
Stewart Goodyear, piano

Repertoire
JONATHAN HARVEY …towards a pure land
RAVEL Piano Concerto for the Left Hand
BERLIOZ Symphonie fantastique
Community Concerts at Second – Soloists and chamber ensembles perform in a series of concerts at Second Presbyterian Church in Baltimore just north of the JHU campus. The acoustics are phenomenal, the players exceptional, and the concerts are FREE! 4200 Saint Paul St, Baltimore, MD 21218  www.cc2nd.org

Keystone Korner of Baltimore – The owner of the original Keystone Korner in San Francisco has taken advantage of the tradition of jazz in Baltimore. Greats have included Billy Holiday, Ethel Ennis, Eubie Blake, Gary Bartz, Chick Webb, Antonio Hart, and Cab Calloway. In addition to headliners, the performers include promising jazz musicians. Not only does the club serve soul satisfying music but also excellent food. There are two sets in an evening so the second set is perfect to follow the meeting activities. 1350 Lancaster St., Baltimore 21231 410-946-6726  www.keystonekornerbaltimore.com

**Theatre**

Everyman Theater

The Lion in Winter  October 18-November 13

Written by James Goldman - A family feud of imperial proportions! Set during Christmas 1183, Lion tells the wickedly amusing tale of King Henry II, his imprisoned queen, Eleanor of Aquitaine, and their three entitled, double-dealing sons who vie for the throne. Best known for the film adaptation starring Peter O’Toole and Katharine Hepburn, this viciously funny drama is a high-stakes chess game where the pieces constantly change and no one is spared the sword. Betrayal, treachery, and fights to the death – just another joyous Royal Family Christmas!

315 W Fayette St, Baltimore, MD 21201 (410) 752-2208  https://everymantheatre.org/

Center Stage

Ain't No Mo’  October 27-November 20

Fasten your seatbelts— it's going to be an outrageous ride. Jordan E. Cooper's masterful no-holds-barred comedy is a surreal journey through Black America as Peaches, a narrator and flight attendant, invites Black Americans to board African American Airlines' one-way Flight 1619 back to Africa for a mass exodus. She guides the audience through a mosaic of vignettes that use satire, allegory, and speculative fiction to explore the value of Black lives in a country so intertwined with them in this "campy, shrewd, mortifying, scary, devastating, and deep" play (The New York Times).


**Sports**

The Baltimore Orioles –Oriole Park at Camden Yards is an impressive modern baseball park, one that was the model for several other contemporary parks. Unfortunately, baseball ends before the meeting. Fortunately, the major social function for the meeting will be at Oriole Park, with a chance to enjoy the architecture and facilities.

Baltimore Ravens – M&T Bank Stadium is home to the Ravens football team. On Sunday, November 20, at 1 p.m., the team will play the Carolina Panthers.  https://Baltimoreravens.com

**Food**

Baltimoreans love to eat! The number of restaurants, the ethnicity of the food, the price ranges are all too numerous to list. Blue crabs, oysters and rockfish are area specialties, all harvested from the Chesapeake Bay. Maryland Crab Cakes are often imitated but never the same as right here in Baltimore. Dissecting (otherwise known as “picking”) your own steamed Blue Crabs covered with Old Bay Seasoning is an experience you’ll never forget. The City Visitors’ Guide is a good source for your dining decisions.
Neighborhoods

Many of the areas in and around the City reflect the nationalities that established them. Greek Town, Little Italy have obvious origins. Brewers Hill and Butchers Hill reflect the major industries that once employed the citizens living there.

The most colorful is Fells Point located on the Inner Harbor. Protected by the City from destructive gentrification and commercialization, the area is amazingly authentic. Chain businesses are prohibited. Cobblestone streets, old row houses, saloons with worn wooden floors all contribute to a delightful nostalgia. Restaurants are numerous, not expensive, with a full range of dietary delights and preferences. Walking is pleasant all times of the day and evening, and shops line streets to entice passers-by. https://fellspointmainstreet.org/

On the other side of the Inner Harbor is Federal Hill. A defensive stronghold during the war of 1812, the area still has cannons as reminders of the battle. The Hill provides a panoramic view of the Inner Harbor with the Tall Ship USS Constellation and the National Aquarium. American Visionary Art Museum and the Baltimore Museum of Industry are the main attractions, and row houses exemplify Federalist architectural style. Federal Hill is also located right next to Locust Point, where Fort McHenry calls to history buffs. Numerous art galleries and gift shops abound. https://baltimore.org/neighborhoods/federal-hill/

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I hope you enjoy Baltimore as much as Bill and I do. Should you have questions about any of these sites and events, please send me a text and I’ll be happy to answer them. 410-303-6154.

Baltimore in a word is WONDERFUL

From the vantage point of ASC Member
Dorothy L. Rosenthal, MD, FIAC
Abdominal Wall Mass with a Challenging Differential Diagnosis

Pamela Gibson, MD
University of Vermont Medical Center/Larner College of Medicine at UVM
Burlington, Vermont

Seyedreza Mousavi, MD, MS, CT(ASCP)CM, MBCM
Beth Israel Deaconess Medical Center
Boston, Massachusetts

Disclosure: None

Continuing Medical Education (CME): The American Society of Cytopathology is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American Society of Cytopathology designates this enduring educational activity for a maximum of 1 AMA PRA Category 1 credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

American Board of Pathology Maintenance of Certification (MOC): This product can help fulfill the CME requirements and Self-Assessment Modules (SAMs) mandated by the American Board of Pathology MOC process.

Continuing Medical Laboratory Education (CMLE): The ASC designates this activity for the indicated number of CMLE credit hours and also fulfills requirements of the ABMS to participate in the Maintenance of Certification program.

This program is approved for continuing education credits in the State of Florida for 1 credit and the State of California for ½ credit.

Clinical History
A 67-year-old man presents with a mid-line abdominal wall mass during a pulmonology visit for a seasonal cough. He is a farmer and a butcher. He has a history of malignant melanoma, type-2 diabetes mellitus, and seasonal cough. He underwent a left total nephrectomy three months prior to the visit for a renal neoplasm. Imaging of the new mass revealed a hypoechoic 5.7 cm mass lying deep to the midline peritoneum between the xiphoid process and umbilicus. Fine-needle aspiration of the new mass is performed.

Cytopathology Features
Typical features of classic renal angiomyolipoma include spindled-shaped and/or epithelioid perivascular cells, admixed with blood vessels and adipocytes with differing proportions. The epithelioid variant of renal angiomyolipoma has at least eighty percent epithelioid component with varying degrees of pleomorphic and enlarged nuclei with atypia, and prominent large nucleoli.

Figure 1: Pap stained smeared slide of FNA showing loosely associated neoplastic cells with significant nuclear pleomorphism and multinucleation with vesicular nuclei and prominent large nucleoli. The cytoplasm is delicate and fraying.

Figure 2: Air-dried May Grunwald Giemsa (MGG) stained smeared slide demonstrating significant nuclear polymorphism of neoplastic cells.
Telecytology Bulletin

From the Current Research and Concepts Committee

Introduction

Telecytology is a modality where diagnostic evaluation and assessment of cytological slides have been converted to digital images. Telecytology has been beneficial to a rising number of cytology practices, especially those with a cytologist covering multiple procedure rooms in one hospital or even multiple hospitals and for rural locations with a shortage of cytopathologists. During the COVID-19 pandemic, the need for accurate and efficient digital pathology tools and people well-trained in operating them became more urgent. Telecytology can be beneficial for cytologists who need to work from home due to pre-existing health conditions and for those who need to be childcare or adult care providers. However, there is limited knowledge on what practice settings are using it and how. In this bulletin, we will discuss the various ways telecytology can be used and what types of systems are being offered.

How is Telecytology Being Used

Telecytology has clinical, research, teaching, and potentially medicolegal applications. For clinical use, telecytology has been mostly used for rapid on-site evaluations (ROSE). Cytopathologists are called upon to provide ROSE in a variety of procedural suites, such as the radiology suite and endoscopic/endobronchial suites, and in some instances, in a variety of locations. ROSE can be limited by availability of cytopathology personnel if telecytology is not implemented. With telecytology, a cytopathologist does not need to be on-site to perform ROSE. On-site personnel, such as the cytotechnologist, pathology trainee, or proceduralist can smear and stain the material and scan the slides. A cytopathologist can then be stationed at a central location and see slides as they come, instead of going from location to location. This improves efficiency and allows for professional component billing, and studies have shown that telecytology correlates well to on-site evaluation.

Telecytology can also be used for clinical and medicolegal consultation. Instead of having slides sent over, doctors and patients seeking consults can scan slides and have consulting cytopathologists look at them digitally. If image quality is high enough, diagnosis may be rendered with confidence. Lower image quality will usually suffice for presentation at Tumor Boards and other clinical conferences. Digital imaging storage can not only prevent possible damage to the slides in transport but also improve turnaround time.

Digital slides may comprise a research repository. Digital storage allows for slide indexing and image annotation, and it facilitates inter-institutional research collaboration as well as education. Digital images may also be analyzed with digital tools, with implications for the development of artificial intelligence algorithms for common specimens such as urine samples for carcinoma screening. With adequate data storage, there is less risk of losing slides in the archives, and their quality is better preserved.

Finally, using digital slides for education has been well received by cytology trainees and can prepare them for virtual microscopy on board exams.

Systems Currently in Use

A variety of systems can be used for telecytology to suit a variety of needs. Some systems do not require the purchase of additional equipment. One is using video- namely using an eyepiece attachment, such as a cell phone or camera, with teleconferencing capabilities. This allows for real-time visualization of slides, is relatively inexpensive, and can be easily implemented in low-resource settings. This method affords considerable agreement between onsite and remote assessments. However, there are concerns, especially with cell phones, with security and HIPPA protection. Another method is to provide static images, meaning microscopic fields are pre-selected and transmitted as digital images to the pathologist. This method is cost-effective but time-consuming, and the pathologist is unable to view the whole slide.
In “dynamic robotic microscopy” a slide is scanned into a machine, and there is a robotic microscope that allows the operator to view the slides on a screen. Live images can be projected onto a teleconference server and then controlled by the remote cytopathologist. Robotic microscopy requires high-cost equipment but can be placed in various offices, and pathologists can drive the microscope remotely. The biggest limitations come with the network and hardware- If one aspect is down, such as poor internet connectivity or a faulty part in the machine- there needs to be a back-up system. This might be a limitation in situations where the pathologist needs to commute to an off-site hospital or in rural settings with poor internet connection.

Whole slide imaging (WSI) is when a slide is scanned in and the image is uploaded as a file onto a server, where it can be accessed remotely. Because slides are scanned and stored digitally, they can be viewed again in the future, and there is better user function. One issue with whole slide imaging is that commercially available systems are predominantly designed for histology slides (which has a X- and Y-axis), but not for cytology slides (which has a X-, Y-, and Z-axis). WSI is time consuming due to Z-stacking, and there may be errors with attempting to scan cytology slides, which has historically been difficult to capture on whole slide imaging. However, Z-stacking may not be as beneficial for cytopathology diagnosis as once previously believed.

Conclusion

An emerging technology that has improved visualization and diagnostic accuracy, telecytology is a modality that is worth exploring. The Research and Current Concept committee would like to survey ASC members to see what types of places are using telecytology and what systems they are using. We would also like to see how COVID has changed the use of telecytology in the past few years. A survey will be sent out in the future and we look forward to your responses.

References: