Advanced Cytopathology Education

Advanced Cytopathology Education: Personalized for Your Future

April 6-7, 2019
JB Duke Hotel
Durham, North Carolina

Are You Prepared to Meet Future Demands for Cytotechnologists?

Join us for a dynamic educational course designed to help enhance your knowledge and skills in advanced cytopathology practice.

ACE, at its core, is structured to bring advanced cytopathology topics to regional areas based on current and emerging needs.

As a cytotechnologist, you could be left behind if you don't develop new skills to keep up with the growing demands of your field. This is the very reason we developed the Advanced Cytopathology Education Program (ACE).

ACE is a two-day education program created to assist you in transitioning into other practice areas by refining, expanding and strengthening your skills. This is the most proactive way for you to navigate your journey through your changing profession so that you remain in demand and an integral part of the laboratory team.

ACE will cover the current and future Cytopathology changes and developments with:

- Highly comprehensive and customized education sessions to enhance diagnostic techniques
- Engaging and interactive educational strategies
- A dynamic, world-renowned faculty
- Fellow cytotechnologists sharing professional growth experiences

Primary audience: cytotechnologists, cytotechnology students, cytopathologists, pathology residents and cytopathology fellows.

Take charge of YOUR future and advance YOUR Cytopathology skills with ACE!

SATURDAY, April 6, 2019

7:00 am – 7:55 am Breakfast and Networking

8:00 am – 8:10 am Welcome

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Syed Z. Ali, MD
President
American Society of Cytopathology

Morning Moderator: *Michele A. Smith, MS, SCT(ASCP)*

8:15 am-9:30 am **FISH: What, When, Why?**
Daniel F.I. Kurtycz, MD
University of Wisconsin
Madison, Wisconsin

LEARNING OBJECTIVES:
- Discuss basic concepts behind FISH (Why and how)
- Present a short review of genetic abnormalities amenable to FISH detection (What's if good for)
- Show examples of different types of FISH analysis
- Offer a short discussion of the future of FISH and its place among different forms of genetic analysis.
- Suggest that, because of the nature of the analysis, FISH should be added to the domain of Cytotechnology expertise.

Over the last 40 years investigative techniques for the analysis of the genome have spread from esoteric research facilities to the hospital clinical laboratory. One of the principle methodologies is the microscopic analysis of metaphase chromosomes and interphase nuclei by Fluorescent In Situ Hybridization (FISH). Several hundred fish probes and kits are now available to identify single and/or multiple targets in a sample to provide important information about genetically related disease

9:30 am-10:00 am **Incorporating FISH: The Mayo Experience**
Michael R. Henry, MD
Mayo Clinic and Foundation
Rochester, Minnesota

LEARNING OBJECTIVES:
- Review the implementation of FISH on cytology specimens at the Mayo Clinic.

- Learn how Mayo utilizes cytotechnologists in preparing and screening FISH specimens.
- Examine the advantages in using cytotechnologists for FISH screening.

Since 2000 with the advent of Urovision testing for polysomy in urine samples, Mayo Clinic, Rochester has utilized cytotechnologists to do the initial screening of FISH specimens on cytologic preparations. Since that time additional testing for biliary samples was developed and added to the testing arsenal. The use of cytotechnologists to review these samples has resulted in both a quality increase as well as a cost savings for the laboratory. The morphologic skills of a cytotechnologist translates very well when examining these samples enabling the lab to efficiently identify the appropriate cells to evaluate for chromosomal abnormalities.

10:00 am - 10:20 am Break

10:25 am - 11:30 am **Thyroid Cytopathology – Terminology Update, Interpretation Issues and Clinical Management**

Syed Z. Ali, MD
The Johns Hopkins Hospital
Baltimore, Maryland

LEARNING OBJECTIVES:

- Apply the updated Bethesda Reporting System for Thyroid Cytopathology.
- Identify clinical issues and diagnostic limitations.
- Appreciate the clinical implications of cytologic interpretations.

The lecture will present a selective update on the revised 2017 Bethesda System for Reporting Thyroid Cytopathology. The pivotal role of FNA in the management of patients with thyroid nodule will be highlighted. Cytomorphologic characteristics of key lesions will be presented and pitfalls/differential diagnoses will be described. Role of the new ancillary tests (molecular and immunostaining) will be briefly discussed. Clinical implications of cytopathologic interpretations will be emphasized as well as the updated management guidelines for each diagnostic category.

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11:30 am-11:45 pm *A Personal Story*
Embracing Change: Blaze Your Own Path
Kara L. Hansing, MEd, SCT(ASCP)^{CM}
Mayo Clinic and Foundation
Rochester, Minnesota

11:45 am – 12:45 pm Lunch

Afternoon Moderator: Kara L. Hansing, MEd, SCT(ASCP)^{CM}

12:45 pm -1:45 pm **Modern Cytopathology: Expanding Your Cytology Service**
Sara Monaco, MD
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

LEARNING OBJECTIVES:
- Recognize the opportunities and roles of the cytopathology laboratory in the era of personalized medicine.
- Understand the importance of biomarker testing and clinical trials, and know how your cytopathology laboratory can support and help these initiatives in your hospital.
- Learn some of the ways cytopathology laboratories are working with clinicians, radiologists, and research staff to establish new protocols and services, beyond traditional diagnostic work, and what opportunities and challenges this creates.

This session will focus on the impact that the cytopathology laboratory can have in the era of personalized medicine, including its important role in biomarker testing, research protocols, and clinical trials. Knowing how you can expand your cytopathology labs services beyond traditional diagnostic work can help uncover new opportunities and challenges.

1:45 pm -2:45 pm **The Multimodal Approach to Everyday Head and Neck Cytology**
Zubair W. Baloch, MD, PhD
University of Pennsylvania Health System
Philadelphia, Pennsylvania

LEARNING OBJECTIVES:

- Recognize the overlapping cytomorphologic features that may pose diagnostic challenges in the diagnosis of commonly encountered head and neck lesions.
- Understand the important role of clinical data and radiologic examination in facilitating the rapid onsite evaluation of various head and neck lesions encountered in a cytopathology practice.
- Discuss the role of ancillary studies (immunohistochemistry and molecular techniques) as an aid to the pathologic diagnosis.

This presentation will focus on diagnostic challenges encountered due to the overlapping morphologic features between normal/reactive, benign and malignant head and neck lesions and how a correct diagnosis can be achieved by employing a multimodal approach of integrating

2:45 pm -3:05 pm Beverage Break

3:10 pm -4:10 pm **Peritoneal and Pleural Fluids: Pitfalls and Pearls**

Sara Jiang, MD
Duke University
Durham, North Carolina

LEARNING OBJECTIVES:

- Review general principles of fluid cytology
- Review the spectrum of morphology of normal fluid components
- Demonstrate key cytologic features of inflammatory and malignant processes

In this case-based session, normal and abnormal components of fluids will be reviewed, with emphasis on key cytomorphologic features and patterns seen in benign and malignant effusions.

4:10 pm -5:10 pm **Mentoring, Fostering Career Connectedness**

Kristen A. Atkins, MD
University of Virginia Health System
Charlottesville, Virginia

Michele A. Smith, MS, SCT(ASCP)
University of Wisconsin

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Madison, Wisconsin

LEARNING OBJECTIVES:
- Define mentee and mentor roles in the lab and networking circles.
- Identify feedback pathways and barrier.
- Develop strategies to ask for the feedback you need to move forward.
- Apply effective feedback mechanisms to foster connections.
- Create new mentee-mentor relationships and refresh old ones.

In this interactive session, participants will identify mentoring needs and learn strategies of how to be a good mentee and mentor. The session will walk though scenarios on how to get the feedback you want and need; discuss pathways and barriers to giving and receiving effective feedback; and how to foster mentor-mentee relationships, not only within your lab, but also within your networking circles.

5:30 pm – 6:30 pm Reception

SUNDAY, April 7, 2019

7:00 am – 7:45 am Breakfast and Networking (with Vendors)

7:50 am – 7:55 am Welcome and Moderator
Karen Atkison, MPA, CT(ASCP)CMIAC
President
North Carolina Society of Cytology

8:00 am – 9:00 am **Pitfalls and Interesting Cases in EUS Fine Needle Aspiration**
Michael R. Henry, MD
Mayo Clinic and Foundation
Rochester, Minnesota

LEARNING OBJECTIVES:
- Learn the criteria for adequacy for the various potential sampling sites for both EUS and EBUS fine needle aspirations.
- Learn how to triage EUS/EBUS samples for potential ancillary testing.
- Recognize pitfalls in potential look-alike samples.

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The use of endoscopic ultrasound guided FNAs of the gastrointestinal tract (EUS) or the bronchial tract (EBUS) is rapidly becoming the most common way to diagnose or stage primary lesions of the gastrointestinal tract and pulmonary tree and/or collect material for molecular testing. On site evaluation (ROSE) of the material is important to ascertain not only the adequacy for diagnosis but also triage material for different tests. This presentation will use a case based method to highlight challenges and pitfalls in making these evaluations. Topics will cover common problems such as what makes an adequate sample and how to triage the samples for various immunohistochemical or molecular tests. Pitfalls in diagnosis will be covered such as luminal contamination and look-alikes such as small cell carcinoma versus lymphocytes and neuroendocrine tumors versus benign pancreatic acini.

9:00 am -10:00 am **It's Not Just Brown! Cracking the Nut of Immunohistochemistry**

Barbara A. Crothers, DO
Joint Pathology Center
Silver Spring, Maryland

LEARNING OBJECTIVES:

- Discover the general categories of IHC used in pathology.
- Learn what patterns are considered positive and how to apply them to an interpretation.
- Select an appropriate panel of IHC for tumors of unknown primary.

Sure it looks brown on immunohistochemistry (IHC) slides, but does that mean it is positive? Some cytotechnologists are previewing IHC slides for pathologists in both cytology and histology to expedite case turnaround time. Learn to interpret basic IHC patterns and to understand when the test is working, when it is not, and how the pattern contributes to an interpretation. This session provides an overview of the types of, and uses of, IHC used in pathology, focusing on cases that are relevant to current cytology practice, such as lung specimens and tumors of unknown primary. The participant will explore what cases will benefit from IHC and which will not for purposes of appropriate specimen triage.

10:00 am - 10:15 am Beverage Break

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10:15 am- 10:30 am *A Personal Story*
Embracing Change: Blaze Your Own Path
James R. McNulty, BS, CT(ASCP)
Duke University Health System
Durham, North Carolina

10:30 am -12:00 pm **CytoRadiology Needle Core Biopsies and the Duke Raleigh Hospital CytoRadiology Team**
Carol Filomena, MD
Duke Health Raleigh Hospital
Raleigh, North Carolina

James Knutson, MD
Duke Health Raleigh Hospital
Raleigh, North Carolina

LEARNING OBJECTIVES:

- Learn how a cytopathology/radiology team approach optimizes patient care through best practice in specimen collection, rapid examination and specimen triage.
- Learn about the different kinds of radiologic-guided needle core biopsies, similarities and differences of core biopsies from fine needle aspiration biopsies and the circumstances involved in the selection of needle/procedure type.
- Learn how core biopsy specimens are managed by the cytopathology laboratory in a variety of clinical situations to maximize information that will direct further patient care.

A cytopathology/radiology team approach optimizes patient care in the needle core biopsy experience. The best approach to biopsy is determined, the specimen is examined by rapid interpretation and tissue is triaged to maximize information that will direct further patient care. Details of this process as it occurs at Duke Raleigh Hospital will be shared. Interesting cases that illustrate this process will be presented.

12:00 pm – 12:30 pm **CPRC: Current Status and Next Steps**
Karen Atkinson, MPA, CT(ASCP)CMIAC
Burlington, North Carolina

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END OF PROGRAM