

2023 Workshop Abstracts

#1 How to Study for the HT Certification Exam (Full Day Seminar – 6hr)

Presented by: Jefferey M. Stark, HTL(ASCP), QIHC

Saturday, April 15, 2023

8:00am-4:00pm

In this seminar, suggestions will be made on how to prepare for the Histology certification exam such as flash cards and special stain study sheets. We will go over topics such as different types of instruments used in a laboratory in regards to processors, microtomes, and special stainers. Additionally, everyone's favorite, laboratory math and the different types of fixatives that a histotech may encounter. More importantly, we will cover most common tissues submitted for pathology. We will briefly discuss electron microscopy, immunohistochemistry, an area most new hires are interested in learning, and the more complex enzyme histochemistry for those interested in getting their HTL. Finally, near the end, the histotech will be given the opportunity to take a "mini" HT exam to tie everything together that they have learned.

#2 Introduction to Mohs Micrographic Surgery (3hr)

Presented by: Daniel H. Gong, MS, MBA, C-PM, CWMP and Linda R. Cesario, DPM, HT(ASCP)

Saturday, April 15, 2023

8:00am-12:00pm

What is Mohs Micrographic Surgery? Have you ever considered a career in Mohs histology? This presentation will give you insight to the Mohs Surgery procedure. Discussion will include the history of Dr. Frederic Mohs' use of chemosurgery and its development into the current fresh tissue technique along with the advantages and cure rate of Mohs Surgery for treatment of skin cancers. The Mohs frozen section technique and the importance of the frozen section quality, color-coding and mapping for proper anatomical orientation will be emphasized. Embedding methods, cryosectioning and tissue type considerations, such as, fresh tissue, fat, bread loafing vs. horizontal (transverse) sectioning will also be discussed. The types of stains (H&E vs. Toluidine Blue) that are most commonly used in Mohs Micrographic Surgery will be reviewed. Images of current Mohs laboratories will be presented, concluding with discussion of the Mohs technician job market, salary, and outlook for the future.

#3 Quality Management Systems in Histology (90min)

Presented by: Jennifer Nelson, HT(ASCP), HTL, CMP(ASCP), QIHC(ASCP)

Saturday, April 15, 2023

8:00am-9:30am

Quality management is very visible and necessary task that labs are required to do to protect patients as well as ensuring regulatory compliance. Also, managers/supervisors need to be able to explain to what is happening and how it can be improved. Each lab needs ensure the quality of the test for every patient slide. We will discuss how to approach issues and the tools available to use. The attendee will be able to be systematically work on improving metrics/ issues in the histology laboratory.

#4 Advanced Immunohistochemistry (IHC) 3hr

Presented by: Elizabeth Chlipala, HTL(ASCP), QIHC(ASCP) and Diane Sterchi, MSA, HT(ASCP), HTL(ASCP)

Saturday, April 15, 2023

8:00am-12:00pm

Although immunohistochemistry (IHC) is still a powerful tool for detecting and localizing expression of specific proteins in tissues, protocol development and troubleshooting require an in-depth understanding of the staining process. Since the binding reaction between each antibody and its specific epitope is unique, there is no universal protocol that works for all antibodies on all tissues in all species. For this reason, IHC protocol development for Human and Animal use should be carefully documented and follow a detailed process. This not only helps establish clean and accurate staining, but also standardizes and validates the staining interactions between the antibody, control tissues (positive and negative) and the reagents used to detect the antibody. This approach ensures that the final staining protocol is optimized for its intended use and provides staining that is as accurate and consistent as possible. During this session, we will give a general description of the fundamental concepts of IHC staining, discuss a detailed method for developing reliable IHC staining protocols, and present useful approaches to troubleshooting. Topics will include: how to research and select the right antibody and control tissues, comparison of different detection systems, protocol optimization and troubleshooting options, and proper documentation and record keeping. This workshop contains multiple references and examples of techniques and troubleshooting in animal and human tissues along with automated systems.

#5 Science of Tissue Processing, Tidal vs Rotational Processing

Presented by: Andrew R. Lisowski, MS, HTL(ASCP)

Saturday, April 15, 2023

10:30am-12:00pm

Tissue Processing is the most complex and one of the longest steps in the histology workflow. The quality of the processed specimens will determine the quality of the stained slides. By reducing processing times, while increasing tissue quality, a faster diagnosis can be delivered to the patient, promoting better patient care.

In this webinar, we will review the purpose and function of the steps in tissue processing, discuss tissue processing reagents, tissue processing agitation methods, learn how rotational tissue processing differs from tidal processing and uncover a way to improve your laboratory's tissue processing methods by using a rotational tissue processor.

#6 Preparing for a CLIA and CAP Inspection (90min)

Presented by: Jennifer Nelson, HT(ASCP), HTL, CMP(ASCP), QIHC(ASCP)

Saturday, April 15, 2023

1:00pm-2:20pm

Understanding how to prepare for a CLIA/ CAP inspection can be overwhelming. There are differences in the criteria, preparation, and approach of each regulatory agency.

During this session, the speaker will discuss lessons learned being involved in CLIA and CAP inspections. Attendees will come away with a better understanding of the inspection process. Lastly, this workshop will review the process for an inspection if there are any deficiencies and the responses.

#7 RCRA/DOT Training 90 min

Presented by: Zechariah Wilson

Saturday, April 15, 2023

1:00pm-2:30pm

The workshop will teach attendees how to properly manage, handle and prepare laboratory chemical waste for shipment and disposal according to the requirements codified in 49 CFR Part 172 and 40 CFR Parts 262.16, 262.17, and 265.16.

#8 How Cytology Fits into the Diagnostic Puzzle (90min)

Presented by: Kathryn G Lindsey, MD

Saturday, April 15, 2023

3:00pm-4:30pm

Cytopathology is a subdivision of pathology that studies single cells and their features to extrapolate tissue diagnoses from simple non-invasive procedures like fine-needle aspirations, fluid collections, and scrapings or smears such as the Pap Smear. Cytologic specimens are some of the smallest samples that are acquired as part of a patient's diagnostic process, but these tiny samples can provide huge amounts of information. The purpose of this seminar is to introduce histotechnologists to the concept and practice of cytopathology. We will begin with a brief history of cytopathology as an introduction to how the field became an important tool for the diagnosis of disease. We will set expectations by sample site, sample collection method, and sample preparation. This will include information about how various cytologic samples are collected and how they are processed and stained for microscopic examination. We will then discuss basic cytologic features of cells in both normal and disease states. Finally, we will use the acquired knowledge and diagnostic skills to evaluate some cytologic images and formulate a basic differential diagnosis. As medicine becomes more personalized the push to make a diagnosis on smaller and smaller amounts of sample becomes ever greater. The practice and scope of medicine is ever changing, and understanding cytopathology and its role in the diagnostic workup will be an asset to anyone in the field of pathology.

#9 Quality in Digital Pathology Era: Every Pixel Counts (3hr)

Presented by: Elizabeth Chlipala, HTL(ASCP), QIHC(ASCP) and Diane Sterchi, MSA, HT(ASCP), HTL(ASCP)

Saturday, April 15, 2023

1:00pm-4:30pm

Standardization remains a challenge across all Histology laboratories, and at times even from day to day in our own laboratories. In the Era of Digital Pathology uniformed

processing of tissue every step of the way, as well as standardization in staining become corner pillars. During this interactive workshop we will discuss quality oversight from pre-analytical parameters of specimen collection and fixation, to specimen processing and most importantly – approaches to reproducibility of the slides and stains your laboratory produces. Join our discussion and share your experiences, as well as learn about step by step quality approach to laboratory processing that can be applied in clinical environment, as well as in research and veterinary fields. We also will discuss benefits that Digital Pathology adaptation offers you today, and shed some light on “future in the making” innovation tactics on just how field of pathology will be approaching slide interpretation, training and education, or consultations. Join us for a stimulating dialogue of wonderful benefits Digital Pathology can offer your laboratory, once process is well controlled and slides your laboratory produces are uniformed and of excellent quality. Let’s do it together!

#10 Tissue Collection and Necropsy (60min)

Presented by: Elizabeth Chlipala, HTL(ASCP), QIHC(ASCP) and Diane Sterchi, MSA, HT(ASCP), HTL(ASCP)

Sunday, April 16, 2023

8:00am-9:30am

This lecture will address general guidelines for tissue collection in pre-clinical drug discovery and efficacy studies and how improper tissue fixation and collection can affect the overall quality of the histology preparations and skew results. The following key points will be addressed: tissue thickness, plane of section and orientation, along with how to minimize collection artifacts, all of this will lead to higher quality tissue preparations and consistent and reliable data. A brief discussion on perfusion fixation and decalcification will also be addressed.

#11 Tissue Identification (3hr)

Presented by: Jefferey M. Stark, HTL(ASCP), QIHC

Sunday, April 16, 2023

8:00am-11:30am

Too often histotechs just embed, cut, and perform special stains on different types of tissues, but do they really know and understand the tissue they are dealing with. Ideally, histotechs should have a solid foundation with regards to tissue identification in the histopathology laboratory. In this seminar, we will go over tissue types from literally head to toe and gain a better understanding and the ability to recognize any tissue, no matter the stain, under the microscope, including unstained slides. With the aide of the microscope, the histotech will be able to use tissue landmarks to help them identify the tissue. Additionally, the histotech will be given the ability to identify the tissue from poorly and/or incorrectly stained slides. From this knowledge, the histotech will be able to troubleshoot some common stains used in the histopathology laboratory. Near the conclusion of this seminar, the histotech will be given a comprehensive slide quiz to tie everything they have learned together.

