



**North Carolina Society of Histotechnology**  
**2025 Spring Meeting**  
**February 27 - March 1, 2025**



<https://northcarolinasocietyofhistotec@godaddysites.com>

**DoubleTree by Hilton, 4810 Page Creek Lane, Durham, NC 27707**

**ABSTRACTS**

**Basic ISH and IHC**

**Diane Sterchi, MS, HT/HTL(ASCP) | Independent Histotechnology Consultant**

Histology laboratories testing capabilities have greatly increased over the last 6 -10 years including molecular testing. Supervisors are doing a significant portion of benchwork and don't have as much time to train. As new personnel and new equipment along with new tests are entering the laboratory. Technicians may have performed ISH and IHC tests only using automation. They may understand the concept of those tests but have not had to do any by hand. So, some may need a refresher. Most labs are undertaking ISH and IHC in greater amounts than before. ISH and IHC are indispensable tests that are needed to determine if the tissue needs to move on to molecular testing.

**Contact Hour(s): 1.0**

**Building a Business Case – Justifying Laboratory Needs**

**Joshua Greenlee, MBA, HT/HTL(ASCP) | Sakura Finetek USA**

From requesting additional staff headcount to replacing aging equipment, it all costs money. Being successful at ensuring the laboratory's needs are secured in the budget means convincing the holders of the purse strings to open the purse and spend the money, which often feels like a herculean feat. The task is so daunting, that we sometimes forgo making requests and say to ourselves, "Well, they are never going to approve it anyway." How does the laboratory overcome these challenges and get what it needs?

This workshop will cover how to build an effective business case to justify laboratory needs from headcount to equipment. This workshop will identify and define the key components of an effective business case. With these components defined, the workshop will then cover how to measure and analyze the current state of the laboratory to identify opportunities for efficiency, cost-savings, and other metrics used to justify the business case. Finally, the workshop will cover how to appropriately demonstrate these value propositions in a business case.

1. Identify and define the key components of an effective business case.
2. Measure and analyze the current state of the laboratory to identify opportunities to justify the business case.
3. Demonstrate value propositions in a business case.

**Contact Hour(s): 1.5**

**Cervical Cancer Prevention-Evolving Strategies and Diagnostic Solutions**

**Tammy Maury, HTL, Senior Pathology Solutions Specialist| Roche/Ventana (1 Hour)**

Cervical cancer is one of the most preventable cancers today, thanks to vaccination, screening and early treatment. Yet, it remains a leading cause of death in women worldwide, with one woman succumbing to the disease every 2 minutes.

Unlike the majority of cancers, the main cause of cervical cancer is well known with almost all cases caused by the human papillomavirus (HPV), which infects most men and women at some point in their lives. Elimination will only come from a comprehensive, triple-intervention strategy of vaccination, advanced screening and diagnostics, and the early treatment of precancerous or cancerous lesions. Unfortunately, the lack of awareness and access to advanced diagnostic solutions is a crippling issue in the fight against cervical cancer. However, a new era of innovative technologies is transforming cervical cancer screening strategies, paving the way for improved diagnostic and early intervention solutions and accelerating the move towards personalized healthcare.

**Contact Hour(s): 1.0**

### **Change Management in Histology**

**Joshua Greenlee, MBA, HT/HTL(ASCP) | Sakura Finetek USA**

Leading change in a complex workflow such as the histology laboratory can be daunting. No two laboratories have the same workflow or aptitude and feelings toward change. In an ever-changing world, though, new variables or obstacles always arise that require the laboratory to adapt and change. “But that is how we have always done it” is not a sustainable mindset. As necessary as change is, though, it is often not easy, and knowing where to start and how to manage the change can be a challenge. In the end, everyone in the laboratory has a choice to make. Either be dragged kicking and screaming through changes or become proactive drivers and managers of change.

This workshop will cover change management methods and tactics for the histology laboratory. First, the workshop will discuss a brief history of some of the changes in histology and identify current drivers for change. The workshop will then define and explain some of the tools and methods used for change management. Finally, the workshop will explain how to evaluate, prioritize, and measure changes and give examples of change management in action in histology.

1. Discuss a brief history of changes in histology and identify current drivers for change.
2. Define and explain some of the tools and methods used for change management.
3. Explain how to evaluate, prioritize, and measure change and give examples of change management in action in histology.

**Contact Hour(s): 1.0**

### **Equipment Validation: Clinical and GLP**

**Elizabeth Chlipala, BS, HTL(ASCP) QIHC | Premier Laboratory, LLC**

1. Understand the importance of equipment maintenance, calibration, SOP's, training and good record keeping
2. Define validation/verification and the validation/verification process
3. Learn how to prepare a Master Qualification Plan and what equipment needs to be verified and to what extent
4. Review of CAP IHC Validation/Verification Requirements

**Contact Hour(s): 1.5**

### **Forensic Dental Presentation**

**Matthew R Rehmel, MD, Chief Oral and Maxillofacial Pathology, OIC WAMC DC | US Army – Fort Liberty DENTAC**

Live presentation with power-point slides covering dental forensics within the Army/DOD. Objectives to cover include: What dental forensics is, why it's important and its uses, how it's done, and sharing of real-life experiences performing dental forensics at multiple duty stations throughout the US.

**Contact Hour(s): 1.0**

### **Delayed effects of radiation injury in rhesus monkeys**

**George W. Schaaf, DVM, DACVP | Wake Forest University School of Medicine**

Delayed effects of total and partial body irradiation (TBI/PBI) in nonhuman primates (NHP) have been studied in the Radiation Late Effects Cohort (RLEC) for 18 years, including clinical and imaging findings in >300 NHPs and post-mortem examinations in >100, with an average follow-up time of 5 years (range 2 to 18 years) after exposure to TBI (median dose 6.5 Gy, range 1.1-8.5 Gy) and 4 years after exposure to PBI with 5% bone marrow sparing (median dose 9.5 Gy, range 9-10 Gy). Tumor incidence was markedly increased after TBI (23-fold). Brain effects detected by MRI include sporadic resolving multifocal susceptibility weighted imaging lesions at doses >6.5 Gy with a latency period of 5 years, and loss of white matter integrity, though Alzheimer's-type pathology has not been detected. Other TBI-associated abnormalities include cataracts; gonadal atrophy with reduced sex steroid production; reductions in body weight and skeletal growth; increased prevalence of diarrheal disease; peripheral insulin resistance; cardiovascular disease including myocardial fibrosis; and persistent systemic inflammation with chronic elevated neutrophil counts. Immune effects are complex, multi-lineage and differ by age at exposure and time since irradiation, with transient thymopoietic and dendritic cell responses in young animals, and long-term lymphopenia with relative elevation of memory B cells.

Early year 4 data from the high dose PBI subset show survival >90%, and disease patterns differing from that of both TBI and whole-thorax exposure (WTI), including accelerated cataractogenesis, renal disease, and metabolic dysfunction, and more diffuse but milder pulmonary disease compared to WTI.

Underlying pathogenic processes contributing to the multimorbidity phenotype in the RLEC include carcinogenesis, chronic inflammation, microvascular injury, and immune dysfunction. Survivor bias, cohort effects, and concurrent effects of aging and irradiation remain a significant challenge in the analysis and interpretation of long-term effects. This work was supported by U19 AI67798, U01 AI150578, and T32 OD010957

**Contact Hour(s): 1.0**

### **High Reliability in the Histology Lab**

**Dan Scungio, MLS (ASCP), SLS, CQA (ASQ) | Dan the Lab Safety Man, Inc.**

High reliability organizations are those which maintain consistent positive outcomes without major safety incidents. What would it take to get your histology lab to that level? Learn about the processes you need to have in place to improve lab safety.

**Contact Hour(s): 1.0**

### **HT & HTL Review Course**

**Diane Sterchi, MS, HT/HTL(ASCP) | Independent Histotechnology Consultant**

As students are getting ready to take the ASCP certification exam an extensive review is helpful for them to prepare. This course will cover all of the areas of histotechnology that will be tested along with test practice questions at the end of each segment. This presentation will cover how to study and discuss high rated areas in the test.

**Contact Hour(s): 6.0**

### **Incorporating Lean Into Your Lab; A Balanced Approach**

**Jennifer Bower, HTL(ASCP) QIHC(ASCP) LSSBB | Caromont Regional Medical Center**

Mention lean in a histology lab and you will most likely be met with anything from indifference to anger. It does not need to be this way! Simply put, lean is reducing waste while increasing quality. That's it! In this presentation I'll discuss three simple methods of introducing lean in the histology lab. You will learn to spot the seven wastes, find out how to ask the five why's, and you will even learn how to implement standard work. We'll talk about what lean is, and what it is not. I will touch on some history and how these methods have developed over the years, and also talk about the role ergonomics plays in increasing turn around times. You may even fall in love with lean, just like I did! Ok, maybe that's asking a lot, but armed with some easy techniques you will be less apprehensive the next time someone mentions lean!

**Contact Hour(s): 1.0**

### **Primary Screening for Cervical Cancer by HPV**

**F Zahra Aly, MD PhD | Wake Forest University**

The presentation will review the evidence for primary screening of cervical cancer by HPV rather than cervical cytology (Pap smear). It will discuss the utility of HPV in both screening and surveillance of patients with abnormal results. The use of technologies such as Ki67/HPV dual staining will be used as examples of risk stratification. The WHO goals for elimination of cervical cancer and the changing paradigm for other HPV related lower anogenital tract and oropharyngeal cancers will be discussed.

**Contact Hour(s): 1.0**

### **Tissue Collection and Necropsy**

**Elizabeth Chlipala, BS, HTL(ASCP) QIHC | Premier Laboratory, LLC**

1. Address the general guidelines for tissue collection with a specific focus on pre-clinical drug discovery and efficacy studies.
2. Learn how important it is to set and define standards for tissue collection and trimming.
3. Discuss how those standards will help to achieve a high level of overall quality, which will lead to consistency and reproducibility of the histology preparations.
4. Learn that consistency and reproducibility of histology preparations will lead to reliable data.
5. Brief discussion on perfusion fixation and decalcification.
6. Show some examples (based upon my experiences).

**Contact Hour(s): 1.0**

### **The ABC's of AFB**

**Jean Mitchell, BS, HT(ASCP) | Newcomer Supply**

- A. Acid Fast Bacteria (AFB): Acid Fast is a physical property of certain bacteria, rendering these bacteria resistant to decolorization by acids in staining procedures. The significance of the acid fast property, the different types of AFB, and methods of testing the acid fast bacteria will be discussed.
- B. Background: The historical background of AFB staining will be introduced and include Ziehl-Neelsen and Kinyoun stains, along with the Fite stain for Mycobacterium leprae.
- C. Criteria: The criteria of AFB staining methods will be reviewed and troubleshooting suggestions provided to support reliable and consistent AFB staining results in the histology laboratory.

**Contact Hour(s): 1.0**

### **The Mystery of Anatomic Pathology Regulations**

**Dan Scungio, MLS (ASCP), SLS, CQA (ASQ) | Dan the Lab Safety Man, Inc.**

What safety regulation states that you can't chew gum in the lab? Do you need gloves when using a microtome? With so many safety rules and agencies, discerning the actual intent can be difficult. Join Dan the Lab Safety Man as he helps you figure out the mystery of those tricky lab safety regulations.

**Contact Hour(s): 1.0**

### **QIHC Prep Course**

**Elizabeth Chlipala, BS, HTL(ASCP) QIHC | Premier Laboratory, LLC**

The ASCP (American Society for Clinical Pathology) Qualification in Immunohistochemistry (QIHC) is a specialized certification for laboratory professionals who perform immunohistochemical (IHC) testing. It demonstrates expertise in the principles, techniques, and quality control of IHC staining in a clinical or research setting. This workshop will cover some of the concepts and information needed to begin to prepare for the exam, or any individual who would want to gain additional information on the principles of immunohistochemical staining. This workshop will contain brief discussions and overview of the following topics; the basic principles of IHC, fixation and tissue processing, antibody selection and validation, detection systems, control selection and some regulatory guidelines. Reading materials and study guides will be provided.

**Contact Hour(s): 3.0**