

***CALIFORNIA SOCIETY FOR HISTOTECHNOLOGY***

***42nd ANNUAL SYMPOSIUM/CONVENTION***

***MAY 2-5, 2019***

***DoubleTree by Hilton Hotel Pleasanton at the Club***

***7050 Johnson Drive***

***Pleasanton, California 94588***





## CALIFORNIA SOCIETY FOR HISTOTECHNOLOGY

A Continuing Education Program

The 42nd Annual Symposium Convention of the California Society for Histotechnology will be held at the **DoubleTree by Hilton Hotel in Pleasanton, CA**, May 2-5. This program provides complete registration information and will be the **ONLY** registration form you will receive.

### HOTEL RESERVATIONS

Please make your arrangements as soon as possible. **Room reservation deadline is April 11, 2019 at 12:01am.** **Any reservations made after this date will be subject to availability of space and rates quoted below cannot be guaranteed.** MAKE YOUR RESERVATIONS DIRECTLY WITH THE HOTEL (see information below). When phoning in your reservation, be sure to indicate that you are with the CSH Symposium/Convention to receive the rates as quoted below.

### SYMPOSIUM REGISTRATION

Any portion of this program may be photocopied and shared. Please indicate 1<sup>st</sup> and 2<sup>nd</sup> choices on workshops that have a class size limit. If closed, your name will be placed on a waiting list. You will receive written confirmation by US mail or e-mail for any **registration received prior to April 27, 2019. No refunds will be issued after April 30, 2019.** **Any mail in registration received after April 27 will be subject to a \$25 late fee.** Online registration is open until May 1 at 11:59 PM. Please note that there are different fee schedules for CSH and non-CSH members. If you would like to join CSH and receive the reduced member rates, you may do so with your registration or online. Complete the membership application enclosed in this program with your registration and include payment for membership dues to CSH. Remit fees in US Currency and make your checks payable to CSH. Online membership: [https://www.californiahistology.org/member\\_registration/membership.html](https://www.californiahistology.org/member_registration/membership.html)

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### HOTEL RESERVATION INFORMATION

**Group: California Society for Histotechnology**  
**DoubleTree by Hilton Hotel at the Club**  
**7050 Johnson Drive**  
**Pleasanton, CA 94588**

Dates: May 2-5, 2019

- Rooms: single: \$129 double: \$129 triple: \$139 quad: \$149
- Hotel Occupancy Tax: 8.2% per room per night and \$2.25 per night tourism tax
- Self-Parking: Complimentary
- The hotel shuttle will pick up at the BART Stations and Ace Train Station in Pleasanton
- Check in: 3:00 PM
- Check out: 12:00 PM
- The web page address is:
  - [https://doubletree.hilton.com/en/dt/groups/personalized/P/PLEPCDT-CSH-20190502/index.jhtml?WT.mc\\_id=POG#reservation](https://doubletree.hilton.com/en/dt/groups/personalized/P/PLEPCDT-CSH-20190502/index.jhtml?WT.mc_id=POG#reservation)
    - Group Name: CSH 2019 Symposium
    - Group Code: CSH
- Link for directions to the hotel:
  - <https://doubletree3.hilton.com/en/hotels/california/doubletree-by-hilton-hotel-pleasanton-at-the-club-PLEPCDT/maps-directions/index.html>
- Hotel Direct Phone Number: **925-463-8000**

**RESERVATIONS REQUIRED BY April 11, 2019**

## **PRIMARY PURPOSE AND GOALS**

The California Society for Histotechnology is dedicated to the concept of continuing education through which you may increase your knowledge and improve your skills. We intend to introduce emerging techniques and provide updates on routine procedures to insure that the professional capacity of our membership will grow. We hope that attending this Symposium/Convention among your peers will encourage you to seek more information in this and related fields, and that you will become a more valued partner in the histotechnology profession.

## **CONTACT HOURS**

All workshop attendees will receive a CSH certificate of participation at the completion of each workshop. Contact Hours replace CEU's.

## **EQUIPMENT EXHIBIT**

Manufacturing companies will exhibit the latest in laboratory supplies and equipment during the meeting. The Exhibit Hall Hours will be: Friday May 3<sup>rd</sup>, 9:00 A.M. to 5:30; and Saturday May 4th, 9AM to 12 Noon. We welcome and encourage all local technologists and pathologists to view the exhibits, even if they are unable to attend any other function of this meeting.

## **REGISTRATION**

The registration desk will be open at 7:00AM and close at 2:00PM each day of the meeting.

## **NOTICE OF ANNUAL MEMBERSHIP MEETING**

The Annual Membership meeting of the California Society for Histotechnology will be held on Saturday, May 4th in conjunction with the luncheon. Annual awards will also be presented at that time. All members, including those that are not registered for the meeting, are encouraged to attend. CSH Members of the Society not registered for this meeting are welcomed to attend and will be provided lunch.

## **BOARD OF DIRECTORS MEETING**

The Board of Directors will meet on May 4th following the afternoon workshops. Any CSH member is welcome and must RSVP in advance if planning to attend this meeting. Location will be posted at the registration desk.

## **HOSPITALITY SUITES**

A wine and cheese tasting and exhibitor's reception hosted by CSH will be held at the conclusion of Friday's workshops. The location and time will be posted at the registration desk. Other hospitality suites are held at the discretion of individual exhibitors. Announcements will be posted.

## **BREAKFAST AND LUNCHES**

### **FRIDAY LUNCH WILL BE AVAILABLE FOR PURCHASE TO ALL MEMBERS, SEE REGISTRATON FORM.**

The membership luncheon on Saturday, May 4th, is open to all registrants and members of the Society at no additional cost. A Continental Breakfast will be served to those registered in Sunday's workshops.

## **COFFEE BREAKS**

There will be coffee breaks provided each morning and afternoon during workshop presentations. On Friday and Saturday morning, these will be held outside the Exhibit Hall.

## **WORKSHOP LIAISONS**

Liaisons are needed for all workshops. Only one liaison will be assigned for each workshop. It is required that anyone interested in serving as a liaison to submit a registration form with the fees. Upon satisfactory completion of the Symposium/Convention and your liaison duties, the workshop fee will be refunded to you by mail. To apply as a workshop liaison, complete the liaison information area located on the registration form.

## **REMEMBER --- REGISTER EARLY**

In the past, many registrants have been disappointed at not being able to attend the workshops of their choice. Don't miss out!!!! Register Now!!!!

## **Education Program**

**Friday, May 3, 2019  
Morning 8:00 AM to 9:30 AM**

**1. The Next-Gen Histology Lab: How computer Vision, Artificial Intelligence and Robotics Will Revolutionize How Pathology is Done**

**Timothy Spong  
VistaPathBiosystems  
Level: I**

While the technology that drives clinical labs has continued to evolve and innovate, anatomic pathology labs have not seen the innovation needed to meet the demands of patients and clinicians. However, new technologies like computer vision, artificial intelligence and robotic could dramatically change how histology is performed in the coming years. This presentation will provide an overview of new technologies that will soon be entering the histology lab, how these technologies work and why labs need to adopt new technology to survive. A hands-on demonstration of a computer vision system for histology labs will be provided for attendees.

**2. Immunology Basics and Antibody Production for IHC**

**Jason Ramos, Ph.D.  
Biocare Medical, LLC  
Level: I**

This overview of immunology is designed to ensure all participants have a concrete understanding of the biological principles of immunology, how antibodies are made in cells, and the implications of cellular protection on diseases and cancer. Recent developments in the fields of cell biology and immunology will be highlighted to build upon knowledge attendees may already possess. Antibody production and isolation for IHC purposes will also be discussed, focusing on the benefits and limitations of monoclonal and polyclonal antibodies. All of the topics covered will be tied back to the IHC laboratory and protocol to improve basic immunological and IHC-specific knowledge.

**Friday, May 3, 2019  
Morning 8:00 AM to 11:30 AM**

**3. Introduction to Tissue Identification and Pathology**

**Ada Feldman, M.S., HT/HTL (ASCP)<sup>CM</sup>  
ANATECH LTD  
Level: I**

Pathology involves the study of healthy and diseased tissues. Therefore, an applicable tissue identification course would include learning the appearance of both normal and abnormal tissue. This course will cover the tissues commonly received in a clinical pathology laboratory. It begins with an overview of the four basic tissue types: epithelial, muscle, nervous and connective tissues. This will be followed with identification of normal and respective pathologies of skin, gastrointestinal, urinary, lymphatic, respiratory and reproductive systems. H&E, special stains and IHC will be represented. The material introduced will assist technicians in evaluating the quality of their stained tissue sections.

**Friday, May 3, 2019**  
**All Day 8:00 AM to 5:00 PM**

- 4. ASCP Preparation Workshop**  
**Jennifer MacDonald, HT (ASCP), RT(CSMLS)**  
**Mt. San Antonio College**  
**Level: I**

This workshop is designed to provide the attendees the necessary information for preparing for the HT/HTL (ASCP) exam. The workshop will cover the basics of the examination format and the basics of histotechnology. An overview of Computer Adaptive Testing (CAT) and the ASCP exam guidelines will be presented. Topics covered will include fixation, processing, embedding, microtomy, and routine H&E staining. Presentation will include photos of processing and microtomy artifacts. Special staining procedures and basic trouble shooting of special stains will also be included. Presentation will include photos of special stains. Stains covered will be taken from the summary of stains list provided by the ASCP.

**Friday, May 3, 2019**  
**Afternoon 1:30 PM to 3:00 PM**

- 5. The History of Hematoxylin**  
**Jean Mitchell, BS, HT(ASCP)**  
**Newcomer Supply**  
**Level: I**

The first step to diagnosis in the vast majority of tissue slide preparations in any histological laboratory, be it clinical, research or veterinary, is the use of hematoxylin as a routine nuclear stain. Hematoxylin may be a common product in the histology laboratory but its origin, discovery, historical, economic and medical background is anything but common. This presentation will focus on all things hematoxylin including its logwood tree origin, its history and worldwide impact as a textile dye and its discovery as a biological stain. I will further explore the pathologists and scientists that lend their names to different types of hematoxylin and the techniques they incorporated into our all-important nuclear stain.

**Friday, May 3, 2019**  
**Afternoon 1:30 PM to 5:00 PM**

- 6. Fixation, The Artefacts and the Special Stain**  
**David Muirhead, AIBMS, AIMLS, MSA**  
**City of Hope National Medical Center**  
**Level: II/III**

Today it is important for every histotechnologist/scientist to understand the stress we put our histological specimen through and how it effects the outcome. As certified, or to be certified histotechnologists, you strive to produce the best possible sections and stained slides to enable the pathologist to make that ultimate diagnosis which will impact patient care and outcomes.

The artist in you wants to produce that Rembrandt or Van Gogh, not the Picasso. We will give the histotechnologist the tools to understand and troubleshoot the processes to be able to resolve the issues and prevent the artefact. In a short time, we will cover fixation, its properties and along the way discover the associated artefacts produced in the tissue sections. Finally, you will enter the world of special stains and your potential Van Gogh's.

'Always remembering every picture or image tells a story" Rod Stewart or "A picture is worth a thousand words' credited to Fred R Barnard.

**Friday, May 3, 2019**  
**Afternoon 3:30 PM to 5:00 PM**

**7. Personalized Medicine: From Histology to NGS**

**Jason Ramos, Ph.D.**  
**Biocare Medical, LLC**  
**Level: II/III**

This overview of Next Generation Sequencing (NGS) is designed to ensure all participants have a concrete understanding of the biological principles of NGS, how the technique leads to targeted therapy diagnostics, and the process of how to get that end-result from FFPE solid tumor tissue samples. Recent developments in the fields of molecular biology and personalized medicine will be highlighted to build upon knowledge attendees may already possess. The challenges of bringing NGS into routine clinical use will also be discussed, focusing on the benefits and limitations, as well as additional applications (RNA-Seq). All of the topics covered will be tied back to the histology laboratory to improve basic molecular understanding and NGS-specific knowledge.



***Friday Evening***  
***“CSH Wine and Cheese”***

**Saturday, May 4, 2019**  
**Morning 8:00 AM to 9:30 AM**

**8. Famous Cancer**

**Nicole Lewis**  
**MilliporeSigma-Cell Marque**  
**Level: I/II**

Breaking News: 90210 actress Shannen Doherty files suit against former manager for health insurance lapse after facing skyrocketing medical bills due to recent breast cancer diagnosis. It's no secret that we live in celebrity centric culture hungry for the latest news about our favorite famous faces. This lecture will employ the fascinating world of celebrities to introduce the immunohistochemical panel approach to disease diagnostics. We will specifically use cancer stories from past and present entertainers, athletes, and politicians to examine the histological characteristics and statistics that define various tumor types. These cases will also be our launching pad as we take a deep dive into the intricate diagnostic world of tumor immunophenotyping by highlighting recent antibody additions and their impact on modern diagnosis. Attendees will learn the utility of these new antibodies and gain a better overall understating of how diagnostic panels are used by pathologists to provide thorough and accurate patient care.

**9. Mastering Process Improvement – A Journey to Perfection**

**Mari Yang, DM, MHA, CT (ASCP) HTL  
Hoag Memorial Presbyterian Hospital  
Level I**

Frustrated with change? Don't be. Change can be wonderful. Change can be scary. Most important, change is inevitable. Learn how to thrive in conditions of change by mastering the tools of process improvement. Become the positive disruptor and ride the surf of change to create better and safer processes for your department. Process improvement is an art form that can yield results, regardless of how large or small of a project scope. In this workshop, participants will learn the basics of process improvement and how to design and execute successful optimization efforts. Let change happen with you, not to you.

**Saturday, May 4, 2019  
Morning 8:00 AM to 11:30 AM**

**10. Part III: How to Be a Successful AP Manager/Supervisor, the Essentials.**

**David Muirhead, AIBMS, AIMLS, MSA  
City of Hope National Medical Center  
Level: II/III**

This is Part III and last of the management lectures we have covered interesting topics over the last two years. We hope that this series of talks will have helped you on your journey of being that successful supervisor\manager and inspire those who are not to have tools to help them achieve their aspirations.

Today's environment, it is essential to change culture and engage your staff at all levels to improve your workflow processes and engagement scores. Your engagement scores are followed at the hospital executive level to help chart the hospitals success in keeping retention to a minimum compared to your various peers in the industry.

Understanding ways for you to be engaging will translate into actions and language that is understood at their level is of paramount importance for you to be successful.

More and more senior executives are implementing surveys, i.e. Action-O-I, Press Ganey, Gallup and The advisory board company to access their divisions and hospital to understand the dynamics of what works and what does not and help to understand the psyche of their workforce. Unfortunately, the success of the manager or supervisor will be based on these scores. As a manager, you will be held responsible and accountable for your overall staff, their performance, engagement and ability to maintain and improve.

Therefore, being successful is understanding the dynamics of your team and knowing how to interact, motivate, and engage is of paramount importance. This workshop will give you some tools and direction that will put you on the road to success.

**11. We Want to Implement Barcoding – Where do We Start?**

**Tim Morken, BA, HTL(ASCP)  
UC San Francisco Medical Center  
Level: II**

Barcoding specimen and materials tracking in the histology laboratory has been convincingly proven to improve patient safety by avoiding common mislabeling mistakes. Barcoding also allows precise tracking of all materials and measurement of workflow down to the minute, which can help manage the work much more effectively. Your institution wants to implement barcoding but you don't know where to start

or what it involves. This presentation reviews the entire process from the initial decision to implement barcoding to choosing a vendor, scoping out the project, determining timelines, determining budget, writing a proposal, working with the vendor and implementing the project. Special emphasis is given to forming teams and what needs to be done to improve operations before the project starts, interfacing with staining instruments and staff training. This presentation is not intended to give exhaustive details or compare all the current offerings of various vendors, except incidentally as examples. Rather, it informs you how to compare and evaluate vendor offerings and the process to follow for research and implementation. The presentation is vendor-agnostic and can be applied to any system.

**Saturday, May 4, 2019**  
**Morning 10:00 AM to 11:30 AM**

**12. Controlling the H&E Stain**

**Ada Feldman, M.S., HT/HTL (ASCP)<sup>CM</sup>**  
**ANATECH LTD**  
**Level: II**

When your hematoxylin or eosin colors are too intense or too weak you may believe that adjusting the staining time is the only option. Understanding the chemical interaction of hematoxylin or eosin stain with their ancillary solutions helps in acquiring the correct colors. With hematoxylin both the acid alcohol and the bluing solution affects the staining behavior on the tissue section. Eosin staining intensity is effected partly by the alcohol rinses. This lecture will give you a chemical review of these solutions that can provide a perfect hematoxylin and eosin look when they are used correctly.

**13. From Manual to Automation: A Look at the Evolution of Histology**

**Joshua Greenlee, MBA, HTL(ASCP)<sup>CM</sup>**  
**Sakura Finetek USA, Inc.**  
**Level: I**

Compared to other areas of the laboratory, the discipline of Histology has been slow to evolve in terms of automated equipment and its related processes. Walking through the average general laboratory side of a hospital or reference lab is a trip through a technological wonderland filled with modern analyzers with whirring robotics and buzzing computers. What one finds strolling through most Histology laboratories is exactly the opposite, with sometimes outdated equipment that could be decades old. With experienced Histotechnologists sometimes difficult to find, turnaround times and quality expectations increasing, and advancing diagnostic processes like molecular and digital image analysis on the rise, automation and its related processes are rapidly becoming a necessity. In this workshop, we will review some of the familiar manual Histology equipment and techniques and introduce some of the related modern automated equipment and processes. Finally, we will review how these new automated systems can impact the workflow and function of a laboratory versus their conventional manual counterparts.



***Membership Luncheon***

**Saturday, May 4, 2019  
Afternoon 2:00 PM to 3:30 PM**

**14. The Name of Stains**

**Jean Mitchell, BS, HT(ASCP)  
Newcomer Supply  
Level: I**

This presentation will focus on "the names of the stains", and an introductory lesson in histology history. Harris, Gomori, Gill, Mayer and Van Gieson are common stains and names spoken on a daily basis by histologists in their every-day working laboratory environment. But what do we really know about the names and these people we talk about every day? I will explore a name, add a face and detail the history to "the names of the stains" that have been our friends for many years but have never been formally introduced to. Isn't it about time we got to know them better?

**15. Unleashing Your Leadership Potential**

**Mari Yang, DM, MHA, CT (ASCP) HTL  
Hoag Memorial Presbyterian Hospital  
Level I**

Leadership success in healthcare is more accessible than you think. For the emerging leader, the most helpful piece of advice is how to get from here to (insert desired leadership title). If you're looking for a magic recipe, chances are you won't find one. With the right perspective, you'll discover that you too, can readily step into the role of a leader. By attending this workshop, you will gain insights that can help strengthen your leadership style, regardless of where you're leading from. Study the leadership superpowers so that you can begin your leadership journey today. Your profession in healthcare is an answer to a calling. Are you ready to reveal the leader in you?

**Saturday, May 4, 2019  
Afternoon 2:00 PM to 5:15 PM**

**16. What to Expect when You're Inspecting**

**Patricia Neder-Eckman, BS, HT(ASCP)  
SCPMG Regional Reference Laboratory  
Level: II**

This course will cover two perspectives of the CAP inspection process. The first position will be from the inspector point of view. The course will cover how to prepare to inspect a histology laboratory, inspector requirements, citing deficiencies, and tips for inspection day. This material will be based on the CAP recommendations. The second portion of the course will cover how to prepare a histology laboratory and team for a CAP inspection. Understanding the CAP checklist, tips on lab preparation, what to expect by inspectors, and recommendations on addressing cited deficiencies

**17. The Art and Science of IHC (Wet Workshop, limit 30 participants)**

**Jason Ramos, Ph.D., Robin Simpkins, HT(ASCP)  
Biocare Medical, LLC  
Level: I**

This basic overview of immunohistochemistry (IHC) is designed to ensure all participants have a concrete understanding of the total IHC process, from deparaffinization through coverslipping. The advantages and disadvantages of the different antibody types will be emphasized for participant understanding. Additionally, we will spend significant time discussing the various reagents used in IHC to maximize the effectiveness of staining. As the scientific aspects of the IHC procedure are being

described, participants will be painting a representative stain on canvases to highlight the relationship between the scientific and artistic aspects of IHC. As the participants are painting, one of the instructors will be performing a manual IHC stain. All of the topics covered will be tied back to the IHC laboratory to improve basic knowledge and IHC skills.

**Saturday, May 4, 2019**  
**Afternoon 3:45 PM to 5:15 PM**

**18. Validation and implementation of the BxChip method of processing prostate needle cores in the Histology laboratory**

**Jeanne Clark, HT(ASCP), Dr. Sunny Kao, Eric Miller, Betty Kuruvilla, Dominique Burns**  
**Stanford Health Care**  
**Level: II**

The conventional collection and processing of prostate needle core biopsies have become time consuming and labor intensive process, resulting in increasing turnaround times for patient results. Routine submission of prostate cores can result in 12 – 16 blocks for Histology processing. The BxChip reduces the number to 2 – 3 blocks, significantly reducing technical time and supply expenses. In this presentation, we will walk through the process of deciding to trial the use of the BxChip on prostate core biopsies, the validation of the new protocol and the implementation in the lab. The main focus points include the challenges involved in the optimization process, the validation requirement and the stabilization of the process, along with unexpected issues that have come along with it. Each step of the process will be presented by the different parties involved – the decision and review by the medical director and validation and implementation by the Histology staff, to provide insight on the challenges involved and the improvements once implemented and fully incorporated into the workflow.

**19. Pathology Laboratory Safety**

**Shirley Pan, MSHCA, CT(ASCP)HT, Caren Ann Echague Aguilar, BS, HTL(ASCP)**  
**Dignity Health**  
**Level II**

This workshop will provide laboratory workers with safe work procedures and chemical safety information to reduce the risk of injury and illness. The topics that will be covered include chemical safety, biological safety, radiation safety, and electrical safety. Attendees will receive information regarding health hazards, routes of exposure and effect of chemical contact along with how to control the risk by using personal protective equipment when handling and how to store when not in use. A review of actions that should be taken to correct hazards and emergency procedures in case of accident will be provided. Guidance will be offered for setting up an emergency action plan for your department.

**Sunday May 5, 2019**  
**Morning 8:00 AM to 9:30 AM**

**20. Disseminated Intravascular Coagulation in Forensic Pathology: Histopathology for Diagnostic Confirmation**

**Timothy Dutra, MD, Ph.D.**  
**Los Angeles Department of the Coroner-Medical Examiner**  
**Level: II**

Disseminated intravascular coagulation (DIC) is a frequent complication of critical clinical conditions, such as sepsis, shock, or obstetrical calamity. Most often DIC is due to the uncontrolled activation of the cascade of circulating blood clotting factors, overwhelming the inhibitory actions of the circulating

fibrinolytic factors. However, there is another type of DIC, which is initiated by aberrant activation, and aggregation of circulating blood platelets.

By law, all accidental deaths, including those due to complications of therapy, must be certified by the Department of the Coroner/Medical Examiner. In this presentation, five cases of DIC examined in the Los Angeles Department of the Coroner/Medical Examiner, will be discussed, with demonstration of the utility of histology and immunohistochemistry for diagnosis and documentation of DIC.

**Sunday May 5, 2019**  
**Morning 8:00 AM to 11:30 AM**

## **21. Understanding Tissue Processing Protocols**

**Joshua Greenlee, MBA, HTL(ASCP)<sup>cm</sup>**

**Sakura Finetek USA, Inc.**

**Level: I**

When was the last time the tissue processing protocol in your laboratory was updated? Most laboratories have been using the same set of tissue processing protocols for as long as they can remember. Many labs do not know where their processing protocol came from or even how it was put together in the first place. To some, considering a protocol change is intimidating because they have no idea where to start. New tissue processors are often brought into the laboratory only to be saddled with the same old processing protocols that could be decades old in some cases. Tissue processing is one of the most time-intensive tasks in a histology laboratory, and with the importance of turnaround time and quality continuing to grow; few labs realize that opportunities for efficiency gains can be found right under their noses in terms of updating their protocols. In this workshop, we will debunk some processing myths, review the purpose and function of the common steps and reagents in tissue processing, and finally break down the anatomy of a protocol and learn how to evaluate a protocol for opportunities for improvement.

## **22. Basic Principles of Reagent and Instrument Validation for the Histology Lab**

**Tim Morken, BA, HTL(ASCP)**

**UC San Francisco Medical Center**

**Level: II/III**

The validation procedures of histology laboratories are under increased scrutiny. While IHC validation has received the most press, every new procedure and instrument introduced in the histology laboratory must be validated. This presentation covers the basic tenets of validation requirements that are required for any CLIA-certificated laboratory and may be applied to all validation studies. The relationship between CLIA regulations and the requirements set out by the deemed accrediting agencies (College of American Pathologists and Joint Commission) will be explained. Special emphasis will be placed on distinguishing the need for Validation versus Optimization and what is required for validation in various circumstances. Finally, the relationship between validation and quality control will be discussed. Participants will receive extensive literature references, model validation procedures and validation forms that meet current requirements.

**Sunday May 5, 2019**  
**Morning 10:00 AM to 11:30 AM**

**23. The Role of Histopathology, Immunohistochemistry, and Molecular diagnostics in Treatment Decisions for Breast Cancer**

**Joe Anderson, MD.**

**Level: II**

In this workshop, we will review the role of histopathology, immunohistochemistry and molecular diagnostics in formulating treatment decisions for patients with breast cancer. According to NCCN and SCO clinical practice guidelines, histopathologic diagnosis of breast cancer based on H&E sections remains the foundation of diagnosis. In this era of personalized medicine, Breast Cancer has served as paradigm for individualizing treatment options. IHC for ER and PR has been routine practice for over 20 years. We will review the history ER/PR testing and hormonal therapies as well as recent controversies and the need for increased standardization and the development of ASCO-CAP guidelines. The identification of the HER2 gene and associated monoclonal antibody based therapies has brought with it the need for accurate HER2 testing by both IHC and FISH. Advances in molecular diagnostics and nucleic acid sequencing and expression analysis have further enhanced our ability to customize treatment options for patients. Recent large-scale clinical trials have completed to allow these techniques to become standard of care as well.

## REGISTRATION FORM

**CSH 42nd ANNUAL SYMPOSIUM/CONVENTION, MAY 2-5, 2019**  
**DoubleTree by Hilton Hotel Pleasanton at the Club**  
**7050 Johnson Drive**  
**Pleasanton, CA 94588**

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ Reg # \_\_\_\_\_  
 Home Address \_\_\_\_\_ Check# \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_ Amt Recd \_\_\_\_\_  
 Employer \_\_\_\_\_ Amt Owed \_\_\_\_\_  
 Work Address \_\_\_\_\_ Refund \_\_\_\_\_  
 \_\_\_\_\_ Comments \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

E-mail (mandatory) \_\_\_\_\_ Preferred Phone \_\_\_\_\_

Mail all correspondence to:  Home **OR**  Work (if not specified all correspondence will be sent to home address)  
 If you are not currently a CSH Member or wish to renew your membership, you may do so at this time and pay member fees for your workshops. Fill out the attached membership application and include the appropriate dues with your registration fees.

**CONTACT HOURS: CEU Certificates will be available for pick up at the completion of each workshop for preregistered attendees.**

If you require a vegetarian meal for your lunch(s), check here \_\_\_\_\_

Date and Time of Workshop		Length/CEU hours	CSH	NON	Student/Military**	Amt
<b>FRI, May 3rd, Morning Workshops - 8:00 AM to 9:30 AM</b>						
1	The Next-Gen Histology Lab	90 min	\$25	\$40	\$15	
<b>FRI, May 3rd, Morning Workshops - 8:00 AM to 11:30 AM</b>						
2	Introduction to Tissue ID and Pathology	3 hrs	\$40	\$70	\$25	
<b>FRI, May 3rd, All Day Morning Workshops - 8:00 AM to 11:30 AM</b>						
3	Preparing for the HT/HTL(ASCP) Exam	6 hrs	\$80	\$140	\$50	
<b>FRI, May 3rd, Morning Workshops - 10:00 AM to 11:30 AM</b>						
4	Immunology Basics and Antibody Production	90 min	\$25	\$40	\$15	
<b>FRI, May 3rd, Afternoon Workshops – 1:30 PM to 3:00 PM</b>						
5	The History of Hematoxylin	90 min	\$25	\$40	\$15	
<b>FRI, May 3rd, Afternoon Workshops – 1:30 PM to 5:00 PM</b>						
6	Fixation, The Artefacts and the Special Stain	3 hrs	\$40	\$70	\$25	
<b>FRI, May 3rd, Afternoon Workshops – 3:30 PM to 5:00 PM</b>						
7	Personalized Medicine	90 min	\$25	\$40	\$15	
<b>SAT, May 3th, Morning Workshops – 8:00 AM to 9:30 AM</b>						
8	Famous Cancer	90 min	\$25	\$40	\$15	
9	Mastering Process Improvement	90 min	\$25	\$40	\$15	

<b>SAT, May 3th, Morning Workshops – 8:00 AM to 11:30 AM</b>						
10	Part III: How to be a Successful AP Manager	3 hrs	\$40	\$70	\$25	
11	We Want to Implement Barcoding	3 hrs	\$40	\$70	\$25	
<b>SAT, May 3th, Morning Workshops – 10:00 AM to 11:30 AM</b>						
12	Controlling the H&E Stain	90 min	\$25	\$40	\$15	
13	From Manual to Automation	90 min	\$25	\$40	\$15	
<b>SAT, May 3th, Afternoon Workshops – 2:00 PM to 3:30 PM</b>						
14	The Name of Stains	90 min	\$25	\$40	\$15	
15	Unleashing Your Leadership Potential	90 min	\$25	\$40	\$15	
<b>SAT, May 3th, Afternoon Workshops – 2:00 PM to 5:15PM</b>						
16	What to Expect When You're Inspecting	3 hrs	\$40	\$70	\$25	
17	The Art and Science of IHC (Wet Workshop)	3 hrs	\$40	\$70	\$25	
<b>SAT, May 3th, Afternoon Workshops – 3:45 PM to 5:15 PM</b>						
18	Validation and Implementation of the BxChip	90 min	\$25	\$40	\$15	
19	Pathology Laboratory Safety	90 min	\$25	\$40	\$15	
<b>SUN, MAY 4th, Morning Workshops – 8:00 AM to 9:30 AM</b>						
20	DIC in Forensic Pathology	90 min	\$25	\$40	\$15	
<b>SUN, MAY 4th, Morning Workshops – 8:00 AM to 11:30 AM</b>						
21	Understanding Tissue Processing Protocols	3 hrs	\$40	\$70	\$25	
22	Principles of Reagent and Instrument Validation	3 hrs	\$40	\$70	\$25	
<b>SUN, MAY 4th, Morning Workshops – 10:00 AM to 11:30 AM</b>						
23	The Role of Histopathology, IHC, and Molecular	90 min	\$25	\$40	\$15	
<b>Total Fees for Workshops</b>						
<b>Registration Fee (required, non-refundable)</b>						<b>\$30</b>
<b>Friday Lunch - Specify no: ____ x \$25.00 =</b>						
<b>Guest Tickets*** for Saturday Membership luncheon - Specify no: ____ x \$30.00 =</b>						
Membership Dues (Optional. Fill out application and enclose with registration)						
<b>Late fee (Registration received after April 27, 2019. Includes onsite registration) = \$25</b>						
<b>TOTAL AMOUNT ENCLOSED</b>						

\*\* Note: Student and Military Categories requires Proof of Status

Student must be enrolled in an NAACLS accredited laboratory science program (i.e. Histology, Cytology, Clinical Laboratory science, Phlebotomy). Military members will be asked for military ID.

Provide contact information for Program Director: \_\_\_\_\_

\*\*\* Membership luncheon is provided to registrants and CSH members. Guest tickets can be purchased for \$30.00 per person

Make check payable to CSH and mail registration form to:

Beverly A. Chandler  
P.O. Box 191361  
San Diego, CA 92159-1361  
ba\_chandler@hotmail.com

Any questions can be directed to Kathy Hardy at:  
kathy.hardy@sbcglobal.net  
(408) 772-8238

You may also register on-line on our website:  
<http://www.californiahistology.org/events.html>

**Liaison Information** (description of duties may be obtained from the registrar)

I am interested in being a liaison for the following workshop: \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Preferred Phone \_\_\_\_\_ e-mail \_\_\_\_\_

TO BECOME A MEMBER OF CSH AND **OBTAIN MEMBERSHIP RATES FOR THE WORKSHOPS**, COMPLETE THE APPLICATION ON THE FOLLOWING PAGE. INCLUDE THIS FORM WITH YOUR CONVENTION REGISTRATION. INCLUDE ADDITIONAL MONEY FOR MEMBERSHIP DUES WITH YOUR REGISTRATION.

**CALIFORNIA SOCIETY FOR HISTOTECHNOLOGY**  
**Membership and Renewal Application**

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Place of Employment \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Phone (Home) \_\_\_\_\_

Phone (Work) \_\_\_\_\_

E-mail (mandatory for registering) \_\_\_\_\_

Preferred Mailing Address:  Home  Work

**MEMBERSHIP STATUS**

New  Renewal

**CHAPTER**

Los Angeles/ San Bernardino

San Diego

Northern/San Joaquin

**Dues**

<b>Membership Types</b>	<b>Mail-in Rate</b>	<b>Online Rate (includes service fees)</b>
Regular	\$35	\$40
2-Year Regular	\$60	\$66
Student*	\$20	\$24
Retired	\$20	\$24
Military*	\$20	\$24

**\*Student and Military membership rates require proof**

**CHECK ALL APPLICABLE BOXES**

- |                                      |                                 |                                      |                                      |
|--------------------------------------|---------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> HT (ASCP)   | <input type="checkbox"/> AA/AS  | <input type="checkbox"/> HOSPITAL    | <input type="checkbox"/> SALES       |
| <input type="checkbox"/> HTL (ASCP)  | <input type="checkbox"/> BA/BS  | <input type="checkbox"/> CLINICAL    | <input type="checkbox"/> EDUCATION   |
| <input type="checkbox"/> MLT (ASCP)  | <input type="checkbox"/> MA/MS  | <input type="checkbox"/> PRIVATE LAB | <input type="checkbox"/> STUDENT*    |
| <input type="checkbox"/> MLS (ASCP)  | <input type="checkbox"/> PhD    | <input type="checkbox"/> UNIVERSITY  | <input type="checkbox"/> RETIRED     |
| <input type="checkbox"/> CT (ASCP)   | <input type="checkbox"/> MD/DVM | <input type="checkbox"/> INDUSTRY    | <input type="checkbox"/> MILITARY*   |
| <input type="checkbox"/> QIHC (ASCP) |                                 | <input type="checkbox"/> VETERINARY  | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Other _____ |                                 |                                      |                                      |

You may also apply for/renew your membership on-line at

[http://www.californiahistology.org/member\\_registration/membership.html](http://www.californiahistology.org/member_registration/membership.html)