

All-City Anatomic Pathology Symposium

Baylor College of Medicine- Cullen Auditorium

Thursday, October 19, 2017

8am Welcome address

Kristine McCluskey, MHS PA (ASCP)

Director of Symposium, Department of Pathology & Immunology at Baylor College of Medicine

8:05-8:50am Processing Osteopathologic Specimens in Surgical Pathology

Denis Akim, PA (ASCP)

UTMB Pathology

This presentation is an overview from old to modern processing of osteopathologic surgical specimens. The most important point in specimen processing today requires advance preparation with collaboration and coordinated teamwork between the surgeon, pathologist, pathologists' assistant and the histology technician. In the past, only x-rays were available whereas today we have additional modalities (CT scans, PET and MRI) to better detail the osteopathologic specimen and must be reviewed prior to surgical dissection and processing. All osteopathologic specimens require specimen sections cut from a mechanical saw followed by decalcification. The former decalcification process was simplistic with harsh acids used to decalcify specimens while today there are advanced decalcification solutions/systems designed for a specific surgical specimen. Successful processing of osteopathologic specimens depends on review of the clinical history with all imaging with decalcification to preserve cellular and tissue structural elements in order to render consistency with the correct final pathologic tissue diagnosis.

9-9:50am

A Comparison of Breast Cancer's Radiologic, Macroscopic and Microscopic Imagery

Kristine McCluskey, MHS, PA (ASCP) and Sagar Dhamne, MBBS, MD

Department of Pathology & Immunology at Baylor College of Medicine

Maelissa Lim and Megan Williams

Quinnipiac University PA Program, Department of Pathology & Immunology at Baylor College of Medicine

Approximately 10% and 20% of breast cancers by mammography and ultrasound, respectively, are undetected, as per the literature. Pertaining to mastectomy and lumpectomy grossing, the macroscopic inspection and sampling of disease, the trained and experienced eye is most useful targeting disease for sampling when disease is unpronounced or undetected upon specimen imaging. A study to find the rate of detected lesions upon solely gross inspection and undetected by specimen mammography post operatively post or prior to neoadjuvant therapy is featured in this session. Breast specimen sampling is reviewed by comparing pre and postoperative imaging with detected or radiographic absence of disease with specimen gross photography. Optimal sampling validation will be offered by microscopic correlation.

10-11am Keynote Address: The History of the Texas Medical Center and Pathology at Baylor College of Medicine

Thomas Wheeler, MD

Chairman of Department of Pathology & Immunology at Baylor College of Medicine

The Texas Medical Center was incorporated more than 70 years ago and Baylor University College of Medicine was its first occupant with the Cullen building being completed in 1947. The Texas Medical Center is the largest life sciences destination in the world. With 106,000 employees, 54 institutions, and thousands of volunteers and patient visits, over 160,000 people visit Texas Medical Center each day. The department of Pathology & Immunology at Baylor has grown remarkably over the years and presently employs 104 full time faculty, 15 graduate students, 9 postdocs (PhD), 12 clinical fellows, 26 residents and 132 staff with a total of 298.

11-11:50am Why We Do What We Do the Way We Do in Genito Urinary (GU) Pathology

Vijulakshmi Padmanabhan, MD

Department of Pathology & Immunology at Baylor College of Medicine

This session will be about grossing GU specimens including Nephrectomy, Cystectomy, TURBT, Prostatectomy, TURP and Orchiectomy specimens. Grossing can be overwhelming for anyone, especially when you are presented with these specimens for the first time. The focus will be on why we ink certain specimens a certain way, correlation with histology, microscopic findings and staging of key malignancies of the kidney, bladder, prostate and testis. The goal will be to help residents and practicing pathologists determine what they need to focus on and why.

12pm-12:50pm How to make directing a lab enjoyable?

Neda Zarrin-Khameh, MD and Reka Szigeti, MD, PhD

Department of Pathology & Immunology at Baylor College of Medicine

You are asked to direct a surgical pathology laboratory. Before you know it, your responsibilities increase abruptly in a logarithmic manner. Efficiency and time management become vital to your survival and you have to develop new skills, improve quality control indicators, etc. How can you not only survive, but also make it fulfilling?

1-1:50pm Strategies in Grossing Lung Specimens and Handling of Kidney Specimens

Chelsea Graun, MHS, PA (ASCP)

Department of Pathology and Laboratory Medicine McGovern Medical School The University of Texas Health Science Center at Houston (UTHealth)

Lung specimens vary from biopsies to complex lobectomies. The majority of lung cancer specimens are sent for frozen section and how to sample these specimens will be reviewed, as well as lung anatomy. The difference between non-small cell, small cell and lung carcinoid tumors will be discussed. Appropriate sections to take for lung transplant cases will be covered.

Kidney explanted specimens range from partial nephrectomies to radical nephrectomies. Some partial nephrectomies and possible donor kidneys are sent for frozen section how to sample these specimens will be reviewed, as well as kidney anatomy. Appropriate sections to take for kidney transplant/non-neoplastic and cancer cases will be covered. Important diagnostic factors for renal cell carcinoma will be discussed.

2-2:50 Gross Teaching Tutorial -Requested by Residents (includes safety demo with Avantik®)

Kristine McCluskey MHS, PA (ASCP) and Leah Greene, MHS, PA (ASCP)

Department of Pathology & Immunology at Baylor College of Medicine and Department of Pathology and Laboratory Medicine McGovern Medical School The University of Texas Health Science Center at Houston (UTHealth)

No one is formally taught in medicine how to instruct unless a degree in medical education is pursued. Pathologists and now pathologists' assistants serve as the primary instructors for grossing, the macroscopic recognition and sampling of diseased tissue. The quality and effectiveness of teaching grossing relies on experience, preparedness and communication skills of the instructor. Preparing the instructor as well as the learner eases the training experience for both parties. Preferred learning styles in medicine are examined. Various methods specific for teaching grossing, will be demonstrated based upon learners' preferences and the teacher's preparedness and experience.

6-8pm Welcome Party at DeBakey Museum

Sponsors TBD

Friday, October 20, 2017

8-8:05am presentation and breakfast by Stat Lab®

8:05-8:50am

Grossing of Gynecologic Specimens: What you do on the grossing bench can change a patient's life!

Ramya Masand, MD

Department of Pathology & Immunology at Baylor College of Medicine

Most complex gynecologic specimens are a part of staging procedures; hence knowledge of staging of endometrium, cervix, tubal, ovarian and lower genital tract cancers is of utmost importance. Pathologic stage and what is expected in the pathology report of each of these cancers will be presented. The presentation will focus on what are the important sections required to be submitted in each of these cancer cases, and how these sections help the pathologist evaluating the case and thus impact patient care. Importance of adequate sampling and appropriate labeling of sections will be stressed upon. The talk will touch upon what are true margins versus surfaces (false margins).

9-9:55am

Pathology assessment of GI, Liver and Pancreas resections: What matters in context of AJCC 8th edition

Sadhna Dhingra, MD

Department of Pathology & Immunology at Baylor College of Medicine

The new 8th edition of the AJCC cancer-staging manual has introduced some major modifications in the TNM classification for esophagus, stomach, liver and anal cancer, and minor modifications in small intestine, colon and rectal cancer. The presentation will discuss the clinical relevance of these changes and dwell on expected changes in grossing protocols. Examples of some of the complex Whipple's resection and hepatobiliary specimens will be presented. The focus will be identification of margins and tumor sampling with regards to TMN staging. The gross pathology will be complimented with microscopic pictures.

10-10:25 Errors in Surgical Pathology: Defining, Classifying and Preventing Errors

Vijulakshmi Padmanabhan, MD

Department of Pathology & Immunology at Baylor College of Medicine

This session will be about errors in surgical pathology- defining the importance of the preanalytic, analytic and post analytic phases where errors occur. It will focus on the broader context of "systems" thinking and how to reduce errors. It will use a hypothetical case where an error occurs followed by analysis of the error and focus on ways to prevent recurrence.

10:30-10:50 Poster Awards

11-11:30am The Long and Winding Road: From Dazed and Confused to Pathologic Enlightenment

Deborah Citron, MD and Christie Finch, MD

Department of Pathology & Immunology at Baylor College of Medicine

Some physicians indirectly choose their career path--beginning that path in another realm of medicine or completely outside of medicine. Two of our speakers for this session left nursing and geology to become pathologists. Those paths will be discussed starting at the undergraduate level, continuing into graduate education and work experience, resulting with the life events leading them to apply to medical school and choosing residency in pathology as their final destination.

1130-11:45 am

Beginning Career Development in Academic Medicine

Kristine McCluskey, MHS, PA (ASCP)

Department of Pathology & Immunology at Baylor College of Medicine

Once landing a job in academic medicine, is one prepared to function dually as a clinician and a faculty member? Is development immediately directed and encouraged as a higher educator? This session is a brief introduction to beginning one's academic career in medicine. The benefits, expected obligations, developmental resources available and overcoming obstacles to achieve satisfaction while having a dual role as a clinician and a teacher are discussed.

11:50-11:55pm

Faxitron® Demonstration

Lunch provided by Faxitron®

12-12:50pm Overview of Medicolegal Death Investigation

Dwayne A. Wolf, MD, PhD

Deputy Chief Medical Examiner Harris County Institute of Forensic Sciences

This presentation will provide an overview of medicolegal death investigation systems. Medical examiner systems will be contrasted with elected death investigation systems (i.e. coroner or Justice of the Peace). A mixed system, which blends aspects of medical examiner and Justice of the Peace practice, is the framework guiding death investigation in Texas. The basic death investigative roles of medical examiners and Justices of the Peace will be described, as will the types of deaths that are investigated by medicolegal authorities. An overview of the Harris County Medical Examiner Office, which is a component of the Harris County Institute of Forensic Sciences, will be provided. The process by which a medical examiner decides to autopsy (or not) will be detailed; the components of an autopsy examination will be discussed – as will some limitations of autopsy. The concept of cause of death will be explained. Cause of death will be distinguished from mechanism of death and manner of death. These concepts form the basis of determining medicolegal jurisdiction, and for completion of death certificates in all types of deaths. The presentation will touch on the

day to day routine of practicing medicine as a forensic pathologist. Finally, the myriad ways in which clinical medicine practitioners will interact with medicolegal death investigation systems will be illustrated.

1-1:50pm Handling of Head and Neck Specimens

Wendong Yu, MD, PhD

Department of Pathology & Immunology at Baylor College of Medicine

Complex head and neck specimens are difficult to handle due to their complicated anatomy and their importance in tumor staging. Additionally, head and neck specimens are diverse and often require effective communication with surgeons. To determine the extent of the tumor, one needs to be familiar with the anatomy and identify the structure involved by tumor. Proper margin assessment is also critical for patient's further management. In this presentation, handling of most common head and neck specimens will be discussed, in the setting of the new AJCC 8th edition cancer staging system. Important anatomy information and special considerations of each site will be covered to facilitate effective grossing.

2-2:50pm Frozen Section Intraoperative Diagnosis and Its Challenges

Neda Zarrin-Khameh, MD

Department of Pathology & Immunology at Baylor College of Medicine

Frozen section provides rapid intraoperative diagnosis, which guides further surgical management. This is a complex technique and it has limitations. Therefore, preparing quality sections is critical in arriving at the correct diagnosis and the subsequent management of the patient. Steps of frozen section - gross examination of tissue, embedding, cutting, fixation, staining and cover slipping - will be discussed briefly. Frozen section technique will also be discussed.

Saturday, October 21, 2017

8-8:50am

Pathologists' Assistants: Where we've been and where we are going; is forensics the final frontier?

Francesca Daher, MHS, PA (ASCP)

Katy Methodist Pathology

This is a detailed look at the history of the PA profession, where it is today and where it is headed in the future. Included are the struggles that have plagued the profession since the beginning and the many triumphs that have been achieved along the way. We will also discuss possible future avenues for expansion of PAs, including a detailed look at forensic pathology. We will discuss the barriers that prevent PAs from expanding into forensics and how we might overcome these barriers to continue our expansion.

9-9:50am

Sweating the Small Stuff: Approaches to Grossing Pregnancy Related and Perinatal Specimens

Karen Eldin, MD, William Ferguson MHS, PA (ASCP), Darryl Kinnear, PA (ASCP), and

Netta Rapuano, MHS PA (ASCP)

Department of Pathology & Immunology Baylor College of Medicine, Texas Children's Hospital

Surgical specimens related to high risk pregnancies and congenital anomalies of the newborn are most often handled in specialty centers. However, unsuspected conditions including postpartum hysterectomy, congenital cystic lung malformations, and neonatal Hirschprung disease may rarely occur in general community practices. These cases, despite similar macroscopic appearances compared to traditional adult specimens, require unique approaches to gross dissection. Understanding of the risk factors, the clinical diagnostic tools and biological courses of these rare conditions allow for simple, targeted gross examinations.

10-1030am **The Mohs Procedure**

Michael Swaby, MD

Department of Pathology and Laboratory Medicine McGovern Medical School The University of Texas Health Science Center at Houston (UTHealth)

1030-1055am **The Trouble with Melanoma**

Hafeez Diwan, MD

Department of Pathology & Immunology at Baylor College of Medicine

Melanoma presents challenges related to diagnosis and treatment. An overview of the histologic and immunohistochemical features of melanoma will be presented, along with problems associated with diagnosis and treatment.

11-1130 Presentation by Fidelity Investments

Tommy Thompson

1130-noon Medicolegal Advice

Maggie Layrisson, JD Attorney at Law

Serpe Jones

This session is presented by Serpe Jones Andrews Callender and Bell Law Firm. HIPAA rules will be re-visited pertaining to specimen photography and secure applications. Social media in medicine including prohibitions and etiquette will be mentioned. This session will end with expectations if involved in a law suit to include being served a notice, notifying your insurance carrier, how to save patient records and specimens and the consequences of destroying medical legal cases.

12-12:50 pm Ophthalmic Specimen Examination

Lunch provided by Avantik®

TBA

Ophthalmic specimens vary from biopsies to complex exenterations. Most complex cases are usually sent to specialists and trainees rarely process them. Global anatomy will be reviewed. Tissue sampling will be reviewed with microscopic correlation following. Exenterations for melanoma, retinoblastoma, sarcoma and squamous cell or basal cell carcinoma will be featured.

1-150pm Examination of Cardiovascular Specimens

L.Maximilian Buja, MD and Bihong Zhou, MD. PhD

Department of Pathology and Laboratory Medicine McGovern Medical School The University of Texas Health Science Center at Houston (UTHealth)

Cardiovascular specimens encompass a wide range including endomyocardial biopsies (EMB), cardiac myectomy specimens, ventricular core specimens obtained at the time of ventricular assist device placement, resected cardiac valves, segments of aorta, endarterectomy specimens, cardiac tumors, vascular stents, vascular grafts, arterial biopsies including temporal artery biopsies, cardiac valves, cardiac devices and hearts

removed during cardiac transplantation. A plan for the evaluation of the specimen should be based on the clinical indication and circumstance for obtaining the specimen.

2-250pm BioRepository Management: A Collaborative Approach

Heidi Wagner, PA (ASCP)

MD Anderson Division of Pathology Department of Translational Molecular Pathology

Personalized medicine and molecular diagnostics are rapidly evolving as standard of cancer care. Cancer research is complex and involves many healthcare stakeholders, not limited to clinicians and diagnosticians. A variety of support staff such as Pathologists' Assistants, Nurse Practitioners and Bioinformaticians allow for systematic collection, storage and delivery of samples and associated metadata. In order to provide research samples and associated metadata for continued quality cancer research and care, centralized biorepositories are evolving. Since centralized biorepositories are core services, their performance is essentially dependent on effective collaboration between clinical and research personnel. Core elements of a central biorepository in large cancer care centers include sample collection according to best practices; accurate management of metadata; processing, storage and delivery of samples per legal, regulatory and ethical guidelines. In order to achieve aforementioned goals consistently, a seamless collaboration between the clinical and research staff is paramount.

2:55pm Closing Address

Kristine McCluskey, MHS, PA (ASCP)

Department of Pathology & Immunology at Baylor College of Medicine

6-8pm Closing party at Platypus Brewing Company

This continuing medical laboratory education activity is recognized by the American Society for Clinical Pathology as meeting the criteria for an estimated 21 CME credit hours for non-physician attendees.