

JOHNS HOPKINS MEDICINE TENTH ANNUAL

[VIRTUAL] PATHOLOGY SYMPOSIUM

September 13-15, 2022

This fall we celebrate a decade of academic excellence. Stay tuned for more information about this year's festivities at: http://pathology.jhu.edu/department/training/symposium.cfm





Sponsored by the Department of Pathology

Description: This Virtual Continuing Education event is intended for <u>all</u> employees of the Johns Hopkins Medicine Department of Pathology and Johns Hopkins Medical Laboratories.

Cost: Free for <u>all</u> Pathology and Johns Hopkins Medical Laboratory employees.

Registration is encouraged to obtain the Zoom link:

 Registration can be done through the Symposium Calendar: http://pathology.jhu.edu/department/training/symposium.cfm
 See your Supervisor for approval to attend during your normal working hours.

Attendance will be tracked in multiple ways:

- 1. Logging into Zoom for each session for the entire session.
- 2. Attendance using Activtracker for designated viewing areas (where each person cannot log into Zoom). JHM I.D. badge is required for electronic attendance tracking.
- 3. Other options may be available for your site.

Attendance Documentation & Certificate Instructions:

- 1. Log in to Zoom or Swipe I.D. badge or sign in for all sessions attending.
- Certificates will be available on the ActivTracker website (https://activtracker.jh.edu) once evaluations have been completed.

<u>Poster Session</u>: Symposium poster presentations will be available online at http://pathology.jhu.edu/department/training/posters.cfm from September 5 – 26, 2022. To receive P.A.C.E.® Continuing Education credit, questions must be answered for a minimum of five posters, and a minimum passing score of 80% must be achieved. Follow instructions on the poster session website. Deadline for submitting answers is September 30, 2022. Examples:

Questions answered for 5 posters with 80% correct receive 1.0 CEU. Questions answered for 10 posters with 80% correct receive 2.0 CEU.

Johns Hopkins Medicine is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program.

8:00a-9:00a

Registration: Immunity to COVID-19 Infection and Vaccination

Immunity to COVID-19 Infection and Vaccination: JHM Hospital Workers SARS-CoV-2 Seroprevalence Study

Course # 612-901-22 / 1.0 credit hours

CE Broker #: 20-919489

Aaron Milstone, MD, MHS
Professor, Pediatric Infectious Disease
Johns Hopkins University School of Medicine

Level of Instruction: Intermediate

Category: Immunology

Target Audience: All are welcome

Description: In June 2020, a team at JHU launched a study to enroll hospital workers and describe the immune response to COVID-19 infection. In partnership with the JHH Clinical Immunology Lab, the investigators measured serum antibodies to monitor response to infection and then to vaccination and vaccine boosters. This talk will describe the design and launch of this study, the multi-disciplinary team, and the development of a repository that supports the research investigators within and outside JHM, and the early and ongoing results of the study.

Objectives:

- Describe strategies to launch a large healthcare worker cohort study.
- Discuss the serologic response to SARS-CoV-2 infection and vaccination.



9:30a-10:30a

Registration: Laboratory Testing in Pediatric Oncology

Laboratory Testing in Pediatric Oncology

Course # 612-915-22 / 1.0 credit hours

CE Broker #: 20-919499

Abdulhafiz Zakieh, MD

Clinical Fellow, Pediatric Hematology & Oncology National Cancer Institute & Johns Hopkins University School of Medicine

Level of Instruction: Intermediate

Category: Blood Bank, Hematology, Chemistry, Molecular

Target Audience: All are welcome

Description: Review of important decision-making utilizing laboratory

testing in pediatric oncology through case presentations.

Objectives:

- Identify common laboratory tests that help guide diagnosis and management in children with suspected malignancies.
- Explain laboratory abnormalities frequently encountered in pediatric oncology.

11:00a-12:00p

Registration: How Pathologists' Assistants & Histotechs Change

Patients' Lives

How Pathologists' Assistants & Histotechs Change Patients' Lives

Course # 612-903-22 / 1.0 credit hours

CE Broker #: 20-919505

Kevan J. Salimian, MD, PhD
Assistant Professor, Pathology
Johns Hopkins University School of Medicine

Level of Instruction: Intermediate **Category:** Histology, Surgical Pathology **Target Audience:** All are welcome

Description: Pathologists' assistants (PAs) and histotechs play an immense role in diagnosis and prognosis for patients. While many of the daily tasks performed by PAs and histotechs may seem "routine", each one is actually incredibly important. The exquisite attention to detail and excellent patient care put forth will lead to life-changing (and even life-saving!) therapies for patients. In this presentation, we will explore several cases where PAs and histotechs have radically altered patient outcomes and lives.

Objectives:

- Explain the careful gross examination carried out by PAs and how it impacts patient care.
- Describe the thorough attention to detail that is put forth by histotechs and how it aids in diagnosis and patient management.

12:30p-1:30p

Registration: Repetitive Motion Injury

Oops, I Did It Again: Repeating the Repetitive Motion Injury in the Laboratory

Course # 612-904-22 / 1.0 credit hours

CE Broker #: 20-925298

Melissa Olson, BS, MBiotech, MLS(ASCP)^{CM}
Clinical Laboratory Scientist III, Johns Hopkins Hospital
Assistant Professor, Medical Laboratory Science, Salisbury University

Level of Instruction: Basic

Category: Safety/Wellness, Ethics
Target Audience: All are welcome

Description: We will discuss repetitive motions injuries in the laboratory, with an emphasis on the role of "invisible disabilities" such as hypermobility disorders. Attendees will learn the process of seeking help from the occupational health clinic, an overview of treatment options and accommodations, the expected healing time involved for both sufferers, and how injured lab workers can best be supported. We will discuss the implementation of proper ergonomics and supportive braces to both facilitate the healing process and reduce the rate of re-injury.

Objectives:

- Describe repetitive motion injuries.
- Differentiate repetitive hypermobility motion injuries and those that do not have hypermobility issues.
- Explain the process of seeking help through occupational health.
- Describe how accommodations are implemented.
- Identify how supervisors can best support injured laboratory workers.

2:00p-3:00p

Registration: Evolution of Immunohematology Technology

Evolution of Technology in Immunohematology Testing

Course # 612-905-22 / 1.0 credit hours

CE Broker #: 20-921339

Tayler A. van den Akker, MD
Transfusion Medicine Fellow, Department of Pathology
Johns Hopkins University School of Medicine

Level of Instruction: Basic

Category: Blood Bank, Molecular, Immunogenetics

Target Audience: All are welcome

Description: An overview of the evolution of immunohematology testing in the blood bank, with a brief history of transfusion medicine, and clinical application with case presentations, with a goal to provide an education foundation to some, a refresher to others, and an enjoyable presentation for everyone.

Objectives:

- Briefly explain the history of blood transfusion.
- Describe the evolution of immunohematology testing and how we got to where we are today from slide to automation.
- Describe the molecular testing utilized for RBC, HLA, and platelet genotyping.
- Apply these methodologies to real life cases.

3:30p-4:30p

Registration: How Does the Human Microbiome Affect Cancer

How Does the Human Microbiome Affect Cancer?

Course # 612-906-22 / 1.0 credit hours

CE Broker #: 20-919511

Karen Sandell Sfanos, PhD Associate Professor, Pathology, Oncology, & Urology Johns Hopkins University School of Medicine

Level of Instruction: Intermediate **Category:** Histology, Microbiology **Target Audience:** All are welcome

Description: This seminar will review ways in which the human microbiome influences different cancer types. Topics will include diet and influence on cancer therapies. The seminar will also describe the concept of a tumor microbiome and the evidence for its existence and/or relevance among various cancer types.

Objectives:

- Describe the concept of a tumor microbiome.
- Discuss ways in which the human microbiome affects various cancer types.

8:00a-9:00a

Registration: Our Shared Stories

Keynote Presentation: Our Shared Stories

Course # 612-907-22 / 1.0 credit hours

CE Broker #: 20-919491

Ralph H. Hruban, MD
Baxley Professor and Director of the Department of Pathology
Johns Hopkins University School of Medicine

Level of Instruction: Basic

Category: Administrative, History **Target Audience**: All are welcome

Description: One way we thrive as an organization is to refresh the stories we tell ourselves. These stories, as David Brooks highlighted in a New York Times article, give us a sense of who we are, what we find admirable and what kind of a workplace we hope to build together. In this talk we will share stories of exemplars who helped shape Johns Hopkins, and who helped transform medicine in America.

Objectives:

- Recognize the impact that Johns Hopkins had on transforming medicine in America.
- Describe how this history informs the world you hope to build here at Johns Hopkins.

9:30a-10:30a

Registration: Science of Yoga

"The Science of Yoga": The Most Precious Gift to Human Life

Course # 612-908-22 / 1.0 credit hours

CE Broker #: 20-925146

Zil Kansagra, MT(ASCP)
Clinical Laboratory Scientist IV, Transfusion Medicine
Johns Hopkins Hospital

Level of Instruction: Basic

Category: Ethics/Diversity, Wellness Target Audience: All are welcome

Description: Yoga is an invaluable gift from ancient India. Learn how the science of yoga was endowed from centuries ago and how it travelled to the US. It is the way to unite with one's highest potential, one's real self and thus be empowered to face life with a calm mind and positive attitude. Explore how Indian culture is beautifully crafted around a core of the yogic way of life. Learn how we in pathology and laboratory medicine can embrace yoga to feel calm and happy as we work through our busy occupation.

Objectives:

- Explain the history and origin of Yoga.
- Explore and appreciate the Indian culture as the yogic way of life.
- Identify places in India and the US that offer a yoga retreat.
- Perform simple yoga techniques to be calm and relax.

11:00a-12:00p

Registration: Great Women in Microbiology 2.0

Great Women in Microbiology 2.0: Cases from the Next Generation

Course # 612-909-22 / 1.0 credit hours

CE Broker #: 20-919517

Paula C. Mister, MS, MT, SM(ASCP)
Education Coordinator, Clinical Microbiology Laboratory
The Johns Hopkins Hospital

Level of Instruction: Intermediate **Category:** Microbiology, Diversity **Target Audience:** All are welcome

Description: Participate in this fun, interactive session combining microbiology with history! Microbiology cases will be presented with patient and lab information, and the audience will "guess" the responsible organism in polling questions. Identification, epidemiology and treatment for these infections will be briefly described. As a follow up to Great Women in Microbiology 2020, interesting historical information will be presented for another generation of "unsung" female scientists who contributed to expanding our knowledge and treatment of microbiologic infections.

Objectives:

- Postulate the causative microorganism for the infections presented, using patient and laboratory information provided.
- Briefly describe identification, epidemiology, and treatment of each organism.
- Recount interesting facts about the featured female scientists associated with each case.
- Develop awareness and appreciation for the accomplishments of outstanding, often unrecognized, female microbiologists.

12:30p-1:30p

Registration: What's New in Organ Donation

What's New in Organ Donation: Pushing Boundaries to Save Lives

Course # 612-910-22 / 1.0 credit hours

CE Broker #: 20-919523

Debbi McRann

Vice President and Chief Clinical Officer The Living Legacy Foundation

Level of Instruction: Basic

Category: Histology, Microbiology, Computer/IT

Target Audience: All are welcome

Description: This presentation will discuss innovation in the organ donation process including:

- Use of the Aperio digital imaging system for allocation of deceased donor kidneys
- Implementation of COVID-19 testing on deceased organ donors
- Recovering and transplantation of organs from COVID-19 positive donors
- Drone (unmanned aircraft system) technology for use in transporting specimens and organs

Objectives:

- State one benefit of the Aperio system for kidney biopsies.
- Identify two types of COVID-19 testing for potential organ donors.
- Describe at least one benefit of transplanting organs from COVID-19 positive donors.
- Explain one benefit of using drone technology.

2:00p-3:00p

Registration: Troponin

Current Troponin Assays

Course # 612-911-22 / 1.0 credit hours

CE Broker #: 20-921341

Seena Tabibi, MD Pathology Resident, PGY-4 Johns Hopkins University School of Medicine

Level of Instruction: Intermediate

Category: Chemistry

Target Audience: All are welcome

Description: This presentation will provide an overview of patients with acute coronary syndromes and some of the current methods for detection of the cardiac biomarker, Troponin, during evaluation of patients with acute coronary syndromes.

Objectives:

- Describe the biomarkers of acute cardiac syndromes.
- Explain the methods utilized to help with determination of acute cardiac syndromes.
- Evaluate laboratory testing when there are concerns for cardiac impairment.

3:30p-4:30p

Registration: Medical Surveillance in the Biomedical Industry

Medical Surveillance in the Biomedical Industry

Course # 612-912-22 / 1.0 credit hours

CE Broker #: 20-919535

Michael A. Sauri, MD, MPH&TM, FACP, FACPM, FACOEM, FRSTM&H, CTropMed

Adjunct Clinical Professor & Occupational and Environmental Medicine Residency Program Bloomberg School of Public Health and US Uniformed Services University Medical Director, Occupational Health Consultants (www.ohcmd.com)

Level of Instruction: Intermediate

Category: Safety

Target Audience: All are welcome

Description: Occupational Medicine specialists serve as "de facto" public health officers for the working population. Workers in the biomedical research industry require medical surveillance to a wide variety of unique workplace hazards. Since the 1930s, the medical literature is replete with laboratory-acquired infections reflecting the changing focus over time of the industry to novel public health threats. This cutting-edge aspect of the biomedical industry makes medical surveillance and the management of work-related exposures problematic at best and often without precedent.

Objectives:

- Identify unique workplace hazards in the biomedical industry.
- Explain medical surveillance in the biomedical industry.
- Discuss the current USPHS pre-exposure and post-exposure prophylaxis guidelines.

8:00a-9:00a

Registration: Cytogenomics Laboratory

A Specimen's Life: An Introduction to the JHH Cytogenomics Laboratory

Course # 612-913-22 / 1.0 credit hours

CE Broker #: 20-921345

Jaclyn Murry, PhD, FACMG
Assistant Cytogenomics Director, Molecular Pathology
Johns Hopkins Hospital

Ying Zou, PhD, FACMG Cytogenomics Director, Molecular Pathology Johns Hopkins Hospital

Level of Instruction: Intermediate **Category:** Cytogenomics, Molecular **Target Audience**: All are welcome

Description: This presentation will highlight testing carried out by the three sections of the JHH Cytogenomics Laboratory. This virtual lab will cover karyotyping, chromosomal microarray (CMA), and fluorescence in situ hybridization (FISH) testing paradigms. The team will provide real-life testing scenarios for amniotic fluid, peripheral blood, and bone marrow.

Objectives:

- Describe the purpose of the JHH Cytogenomics Sections: Prenatal, Postnatal, and Cancer.
- Explain the workflow differences between specimen types and assays.
- Identify future opportunities for cytogenomic testing.

9:30a-10:30a

Registration: Genomic Virus Surveillance

Genomic Virus Surveillance: Clinical and Epidemiological Utility

Course # 612-914-22 / 1.0 credit hours

CE Broker #: 20-919539

Heba Mostafa, MD, PhD, D(ABMM)
Associate Professor of Pathology, Director of Molecular Virology
Johns Hopkins University School of Medicine

Level of Instruction: Intermediate **Category:** Microbiology, Molecular **Target Audience:** All are welcome

Description: This talk will describe the integration of viral genomic surveillance in the diagnostic laboratory and discuss the significance of this approach.

Objectives:

- Describe the trends of respiratory virus circulation.
- Explain the clinical and epidemiological significance of genomic surveillance.
- Discuss the central role of the diagnostic laboratories in viral surveillance.

11:00a-12:00p

Registration: Name That Condition

Name That Condition: Case Studies in Differential, Body Fluids and Urinalysis

Course # 612-902-22 / 1.0 credit hours

CE Broker #: 20-919545

Heidi Hanes, BS, MT(ASCP)SH Senior International QA/QC Coordinator, Johns Hopkins University

Level of Instruction: Intermediate

Category: Chemistry, Hematology, Microbiology

Target Audience: All are welcome

Description: This presentation will consist of case studies in urinalysis, blood differentials, body fluids, and coagulation. Participants will be asked to decide what the condition/disease is associated with the case study.

Objectives:

- Identify additional testing required based on patient information and initial test results.
- Describe the condition or disease based on the test results.

12:30p-1:30p

Registration: Weak D Phenotypes

A Review of Serologic Weak D Phenotypes: Identification, Management, & Current Recommendations

Course # 612-916-22 / 1.0 credit hours

CE Broker #: 20-921351

Kathy Haddaway, MLS(ASCP)^{CM}SBB Technical Specialist II, Transfusion Medicine Johns Hopkins Hospital

Level of Instruction: Advanced
Category: Blood Bank, Molecular
Target Audience: All are welcome

Description: Prevention of anti-D is one of the most important considerations in transfusion medicine, especially for women of child bearing potential. Advances in serologic and molecular identification of patients with RHD variants at risk for anti-D have increased the complexity in managing serologic weak D phenotypes. This discussion will focus on identifying RhD positive patients who are potentially at risk for anti-D production, summarizing testing methods available, and review strategies for patient management.

Objectives:

- Explain the structure and function of Rh antigens.
- Compare and contrast weak D phenotypes and partial D phenotypes.
- Discuss the role of RHD molecular testing in mitigation of anti-D production.
- Review current recommendations for management of patients with serologic weak D phenotypes.

2:00p-3:00p

Registration: Kids NOT Alright

The Kids Are NOT Alright

Course # 612-917-22 / 1.0 credit hours

CE Broker #: 20-921357

Karen L. Swartz, MD

Myra S. Meyer Professor in Mood Disorders, Department of Psychiatry and Behavioral Science Johns Hopkins University School of Medicine

Level of Instruction: Basic

Category: Wellness

Target Audience: All are welcome

Description: The COVID pandemic has had negative psychological consequences for adolescents and young adults. In a recent national survey of schools, 70% of schools reported an increase in the number of students seeking mental health services since the beginning of the pandemic, and 76% of schools reported an increase in staff expressing concerns about the students having symptoms of depression, anxiety, and trauma. Dr. Swartz will discuss strategies to address the needs of students and ways to help them address these mental health issues.

Objectives:

- Discuss the response of adolescents and young adults to the challenges of the pandemic.
- Explain the emotional response to isolation.
- Discuss strategies to address the psychological needs of students.

3:30p-4:30p

Registration: Clinical Toxicology

Clinical Toxicology Testing in the Clinical Laboratory

Course # 612-918-22 / 1.0 credit hours

CE Broker #: 20-921359

Kyana Garza, PhD

Clinical Chemistry Fellow, Department of Pathology Johns Hopkins University School of Medicine

Level of Instruction: Intermediate

Category: Chemistry

Target Audience: All are welcome

Description: Clinical toxicology involves the identification of drugs or toxic substances to determine drug exposure and guide clinical management of patients. This presentation will provide an overview of toxicology testing performed in the clinical lab. Real world situations, i.e. case studies, will be presented to demonstrate the clinical utility of toxicology screens and testing for different applications.

Objectives:

- Describe the methodologies utilized for toxicology testing.
- Differentiate between a toxicology screen and confirmation test.

Thank you to the Pathology Symposium Committee

Pathology Symposium Committee

Chairs: Lorraine Blagg and Mickayla Karikari

Mariam Abdelmasseh Paula Mister
Djoanna Antonio Yulanda Mitchell
Maria Barata Christopher O'Donnell

Ellen Barnes Missy Olson
Michael Dulac Cambri Ostola
Marion Eggleston Becky Parish
Kelly Feehely Penny Spencer
Katie Flickinger Barbara Thompson

Tammy Heacock Ruth Umali Saba Jawhar Nora Viloria Cordelia Lee Ryan Work