QUESTIONS FOR 2020 Pathology Symposium Poster Session:

Symposium poster presentations will be available online at http://pathology.jhu.edu/department/training/posters.cfm from November 9 – 30, 2020. 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 December 4, 2020.

Questions answered for 5 posters with 80% correct receive 1.0 CEU. You may choose to skip 2 posters questions. Enter answers here: https://forms.office.com/Pages/ResponsePage.aspx?id=OPSkn-axO0eAP4b4rt8N7Bq7Jn8ORJFh8t cvsO m0_5UNkY0STFCQ01PMjUwWTIIMDVZOF I zVERDvI4u

The role of SARM1 in traumatic axonopathy in the mouse visual system

Q1. Traumatic (diffuse) axonal injury results from ______.
   a) Rotational acceleration
   b) Blunt focal trauma
   c) Cerebral edema
   d) Open skull fractures

Q2. What is the key regulator that needs to be activated to initiate Wallerian degeneration in the context of traumatic brain injury (TBI)?
   a) Nicotinamide phosphoribosyltransferase (NAMPT)
   b) Sterile alpha and TIR motif containing 1 (SARM1)
   c) Mitogen-activated protein kinases (MAPK)
   d) TIR-domain-containing adapter-inducing interferon-β (TRIF)

Q3. Wallerian degeneration results in ________.
   a) degeneration and fragmentation of axon proximal to the injury site
   b) degeneration and fragmentation of axon distal to the injury site
   c) degeneration and fragmentation of axon at the site of injury
   d) All of above

Q4. Intact axon is featured with ______.
   a) Myelin thickening
   b) Myelin outfolding
   c) Compact myelin
   d) Disintegration of myelin sheath
Utilizing Checklist to Reduce Phlebotomy Delays

1. What Units were involved in the Phlebotomy project to reduce phlebotomy delays and improve Medication Administration?
   a) NEL-5
   b) All psychiatry units
   c) Mey5A
   d) Hospital wide

2. True or False:
   The three main reasons for Phlebotomy delays on Psychiatry Units are:
   - Patient Unavailable,
   - Patient refused (uncooperative),
   - Missing or unscannable wristbands

3. List 4 tasks that the nurses need to do on the checklist to expedite phlebotomy collection.
   a) 1. Inform Patients to expect lab draw 2. Review orders to ensure correct order priority 3. Check Wristband 4. Ensure Isolation signs and supplies are available 5. Coordinate other procedures
   b) 1. Inform Patients to expect lab draw 2. Review orders to ensure correct order 3. Ensure patients go to bathroom 4. Ensure Isolation signs and supplies are available 5. Coordinate other procedures
   c) 1. Inform Patients to expect lab draw 2. Review orders to ensure correct order priority 3. Check Wristband 4. Ensure Isolation signs and supplies are available 5. Send patients to PT

4. Yes or No: Was there an improvement with Phlebotomy delays in 2018?

5. True or False:
   The way the Improvements are controlled is Monitoring by Psychiatry Nursing department as one of their Quality indicator since July 2019
Improving RN - Phlebotomist Communication for Patient Safety

1. What was the goal to improve patient safety?
   a) Reduce near misses of restricted limbs by 25% in 8 months
   b) Reduce near misses of restricted limbs by 50% in 12 months
   c) Reduce the number of reported near misses reported in HERO
   d) Improve the phlebotomy and laboratories reputation

2. True or False: Phlebotomists were placing shunts in the restricted limbs

3. Identify all of the following reasons that cause phlebotomists to attempt to collect blood from restricted limb. (Utilize Fish bone diagram)
   a) Restricted limb not indicated in phlebotomy collection device
   b) Friendly competition between nursing units
   c) Signage placed at different locations in the rooms gets missed
   d) Use of confusing abbreviations
   e) Inaccurate test results
Comparison of an Automated Plate Assessment System (APAS Independence) and Artificial Intelligence (AI) to Manual Plate Reading of Methicillin-resistant Staphylococcus aureus Chromagar Surveillance Cultures

1. True or False: The APAS instrument software utilizes AI to interrogate colonies for size, pigment and granularity and analyzes 200 plates/h.

2. What percent of presumptive positives called by APAS were true MRSA missed by manual reading?
   a) 1%
   b) 3%
   c) 5%
   d) 7%

3. What caused the greatest percent of discrepant results between APAS and manual reading?
   a) Inoculum effect
   b) Non-MRSA microbes
   c) Thin or broken agar
Comparison of Real-time PCR for the Quantification of Epstein-barr Virus in Plasma Using Qiagen and Altona Analyte Specific Reagents

1. Which **two** reagents were being compared for EBV diagnosis?
   - a) Altona RealStar EBV 1.0 kit
   - b) Qiagen Artus EBV ASR
   - c) Qiagen RealStar EBV 1.0 kit

2. Below which viral concentration was a loss of precision seen for both reagents?
   - a) < 2 logs
   - b) > 4 logs
   - c) < 4 logs

3. Which combination of control and reagent had the lowest limit of detection?
   - a) Altona kit using EXACT control
   - b) Qiagen kit using EXACT control
   - c) ZeptoMetrix with Altona kit
1. Which sequence was investigated as a potential biomarker?
   a) PD-L1
   b) LINE-1
   c) PD-1

2. The conclusion was made that the highest proportions of cases that aberrantly expressed LINE1 ORF1p were in which cancer types?
   a) NSCLC
   b) Pancreatic adenocarcinoma
   c) H&N SCC
   d) All of the above

3. True or False: The tissue microarrays (TMA) were stained for LINE1 by chromogenic IHC and visually scored.
Identification of DFS70 Antibodies during ANA screening

1. What does the DFS stand for in DFS70?
   a) Depth First Search
   b) Dense Fine Speckled
   c) Department of Financial Services
   d) Data Field System

2. What three methods were used in this study? (Select three)
   a) Immunofluorescence assay (IFA)
   b) Solid phase red cell adherence assay (SPRCA)
   c) Radioimmunoassay (RIA)
   d) Enzyme linked immunoassay (ELISA)
   e) Immunoadsorption
   f) MALDI-TOF

3. DFS70 can act as a negative predictor for the development of what disease?
   a) Lyme disease
   b) COVID-19
   c) ANA associated rheumatic diseases
   d) Viral hepatitis
Clinical Validity of Serum Antibodies to SARS-CoV-2

1. The sensitivity and specificity of the SARS-CoV-2 IgG assay was 0.976 and 0.988, respectively, when performed ___ days or later after the onset of symptoms?
   a) 8
   b) 10
   c) 12
   d) 14
   e) 16

2. High levels of SARS-CoV-2 antibodies predicted the odds of developing which syndrome?
   a) Chronic fatigue syndrome
   b) Acute respiratory distress syndrome
   c) Multisystem inflammatory syndrome
   d) Mild cognitive impairment syndrome
   e) “Long COVID” syndrome

3. What is the clinical utilities of the SARS-CoV-2 antibody assay?
   (Select all that apply)
   a) Offers and extends window of positivity
   b) Replaces infectious disease screening tests for acceptable plasma donors
   c) Provides information on clinical severity
   d) Confirms COVID-19 diagnosis
   e) Replaces the need for Antigen testing for SARS-CoV-2