Neurologic Disorders

- **Concussion Update 2020: A New Decade for Finding Facts and Debunking Myths**  
  *Faculty: Peter Viccellio, MD, FACEP*
  
  The literature on concussion has grown exponentially over the past decade. Chronic traumatic encephalopathy (CTE), brain remodeling, return to play guidelines, & the connection of concussion to other diseases (e.g. ALS) are only beginning to be understood. Whether working in the ED or on the sidelines, the emergency physician should be aware of literature-based information on this controversial topic.
  
  - Explain the most updated model of brain injury & remodeling.
  - Review the current iterations of concussion, including traumatic encephalopathy, Parkinson’s, & ALS.
  - Discuss how to care for the concussed patient both acutely with consideration of acute & long-term sequelae.

- **Cranial Nerve Conundrums: When is it an Emergency?**  
  *Faculty: Rachel E. Garvin, MD*
  
  Subtle cranial nerve dysfunction can be the tip of a neurologic disaster. When do patients with facial paralysis need brain imaging? Do all third nerve palsies result from posterior communicating artery aneurysm? Which patients with vertigo require neuro-imaging? Using a case-based format, the speaker will reveal how subtle cranial nerve findings can be the tip of a neurologic iceberg catastrophe.
  
  - Review the anatomy & function of the cranial nerves.
  - Describe subtle cranial nerve findings that may represent significant neurologic pathology.
  - Review what cranial nerve findings require further work & imaging.

- **De-escalation in the ED: Treating Agitation**  
  *Faculty: Emily A. Rose, MD, FACEP*
  
  The treatment of agitated patients in the emergency department is evolving. Recent expert consensus documents have modified the approach to treating these patients. These documents include emphasizing the need for early vitals, glucose & oxygenation assessments, use of agitation scales & use of verbal de-escalation, & tailoring the choice of medications to the underlying psychiatric or medical etiology. The speaker will present these guidelines & challenges to treating the agitated patient in the emergency department.
  
  - Explain the role of verbal de-escalation in the treatment of psychiatric patients.
  - Describe the choice of treatment modalities for psychiatric patients in the emergency setting.
  - Review the latest expert consensus guidelines for treatment of agitation.
• **Life-Threatening Headaches in the ED: Evaluation and Management**  
  *Faculty: David Zodda, MD, FACEP*

  Most headaches, 90%, are relatively benign primary headaches --migraine, tension, and cluster. The other 10% are secondary headaches, caused by separate underlying processes, with vascular, infectious, or traumatic etiologies, and they are potentially life-threatening. This speaker will cover important pathophysiologic features of the most common types of life-threatening headaches, the key historical and physical examination information emergency clinicians must obtain, the red flags that cannot be missed, and the current evidence for best-practice testing, imaging, treatment, and disposition of these high risk causes of headaches.

  - Recognize the signs and symptoms of the most common life-threatening secondary causes of headaches.
  - Employ an evidence-based strategy for evaluating undifferentiated headache patients in the emergency department.
  - Develop evidence-based emergency treatment approaches to patients with life threatening causes of headache.

• **Medical Mimics: Medical Causes of Psychiatric Symptoms**  
  *Faculty: Jacob Avila, MD*

  Your “crazy” patient could actually be dying. This course will help you learn how to identify common medical diseases that can masquerade as primary psychiatric disease. Through case-based scenarios, the speaker will provide you the key findings that can you help to differentiate medical from psychiatric, which will be a load off of both of your minds.

  - Identify key features of psychiatric diseases as well as their medical counterparts.
  - Review how these diseases can actually represent a reversible medical condition.
  - Discuss the latest evidence on the diagnosis & treatment of these diseases.

• **Non-Traumatic Back Pain: Why it Should Tighten Your Sphincter**  
  *Faculty: Peter Viccellio, MD, FACEP*

  Back pain is one of the most common symptoms that bring patients to the ED. The vast majority of cases have minor pathology that will improve with time, but a few patients harbor life- or limb-threatening problems that, if not diagnosed properly & rapidly, can lead to paralysis or death. How does the busy clinician find the needle in the haystack? The speaker will review strategies to assess & diagnose these patients so you don’t miss that difficult to identify condition.

  - Identify the important causes of back pain that, if undiagnosed, can lead to spinal cord or cauda equina compression.
  - Discuss the historical & epidemiological features that are “red flags” for a serious cause of back pain.
  - Discuss the physical examination findings that one should document in the record & which findings drive further work-up.
• Perfecting the Neurologic Exam  
*Faculty: Danya Khoujah, MBBS*

Serious conditions can be missed on initial emergency department visits due to subtle neurologic signs that are not readily apparent on the standard, rapid neurologic exam. The speaker will focus on tips and tricks to pick up these subtle neurologic deficits and avoid missing deadly diagnosis and subsequently lawsuits!

- Differentiate true weakness from functional weakness.
- Assess the cranial nerves to detect subtle palsies.
- Identify the cerebellar exam to detect strokes.

• Posterior Strokes: A Dizzying Differential  
*Faculty: Rachel E. Garvin, MD*

Recognition and diagnosis of the less common posterior stroke may often times be tricky. During this case-based approach, the speaker will review the subtle clues that will help you pick up the posterior stroke without delay.

- Review the symptoms that differentiate a posterior stroke from an anterior stroke.
- Describe potential diagnoses that may masquerade as a posterior stroke.
- Review treatment options for the posterior stroke.

• Ptosis, Tingling, & Other Neuro Nuggets  
*Faculty: Evie G. Marcolini, MD, FACEP*

The speaker will cover an expert approach in recognizing and managing subtle neurologic emergencies. Less common, but universally challenging, neurological ailments including Guillain-Barre syndrome, multiple sclerosis, and botulism will be discussed. Latest diagnostic modalities and treatment approaches will be rapidly reviewed highlighting how to avoid missing the diagnosis and delaying critical therapy.

- Review the clinical presentation of a variety of neurologic issues in the ED including MS, GBS, and botulism.
- Describe the appropriate evaluation of these neurologic conditions.
- Explain the conditions that require emergent therapy to improve outcomes.

• Stop the Pounding: Update on Headache Assessment & Treatment  
*Faculty: Matthew S. Siket, MD, FACEP*

Patients with a headache often present a conundrum to the emergency physician. The National Quality Forum is now looking at inappropriate imaging in these patients. The speaker will explore who needs imaging, discuss current guidelines for acute migraine treatment, and review the management of other headache syndromes.

- Apply an algorithm for appropriate use of imaging in patients with headache.
- Review the current guidelines for acute migraine therapy.
- Review management of trigeminal neuralgia, cluster headaches and post-LP headaches.
Courses by Track

• Stroke Care 2020: State of the Art
  Faculty: Zachary Repanshek, MD

  Diagnostic & therapeutic interventions for patients with ischemic symptoms continues to evolve. Using a case-based approach, the speaker will explore the latest data regarding selection criteria for IV tPA, endovascular therapy for large vessel occlusion ischemic strokes, & EMS routing policies for suspected acute stroke. The controversies regarding thrombolytic agents in acute stroke also will be explored.
  • Discuss the differences between the ACEP Clinical Policy for tPA, the FDA guidelines, & the AHA/ASA guidelines.
  • Describe the imaging selection criteria for treatment with IV tPA versus endovascular therapy.
  • Describe current controversies in the emergency management of acute stroke patients & the implications.
  • Discuss how to optimize care of the ischemic stroke patient regardless of stroke center designation.

• Subtle Presentations of Devastating Neurologic Conditions
  Faculty: Rachel E. Garvin, MD

  How does the expert clinician manage to sort through a sea of seemingly vague & disconnected complaints to pick up rare but critical neurological conditions? What historical & neurological exam clues do astute physicians focus on & why? What are the essential elements of the neurological history & exam, & how should they be interpreted to exclude a potentially devastating acute process? Test your skills as the presenter works through challenging cases to illustrate important features of the evaluation to make the right call.
  • Identify common signs & symptoms that are associated with life-threatening neurological conditions.
  • Describe diagnostic mishaps that get providers in trouble.
  • Describe approaches that increase the likelihood of making a tough neurologic diagnosis.

• Subtle Strokes: Symptoms You Can't Neglect!
  Faculty: Zachary Repanshek, MD

  Stroke can be devastating and made even worse if the subtle or atypical symptoms are not recognized and action take right away. This case-based presentation will leave you an arsenal of "can't miss" examples of unusual presentations of stroke. Recognize these zebra like symptoms when you hear hoof beats.
  • Describe posterior stroke pathology and symptoms.
  • Describe the most common misdiagnosis for patients presenting with subtle signs of stroke.
  • Describe cognitive bias issues that may lead to missing the subtle symptoms of a stroke.
Courses by Track

- **TIA Management: Don't Just Do Something, Stand There**  
  *Faculty: David Zodda, MD, FACEP*
  
  A significant proportion of patients presenting to the ED with a stroke will have resolution of their symptoms. Should we be intervening in patients with rapidly improving neurologic exams. This high-yield & brief session will review the current treatment options for TIA in the ED.
  
  - Differentiate between TIA & ischemic stroke in the ED in a expedited manner.
  - Discuss treatment options for the TIA patient.
  - Describe when you should consider ischemic stroke treatment & when you should not in the patient with evolving neurologic deficits.

- **What Do You Mean Dizzy?**  
  *Faculty: Matthew S. Siket, MD, FACEP*
  
  Seeing the chief complaint of “dizziness” on a patient chart often evokes a visceral response from the emergency physician. The speaker will show how to quickly categorize dizziness into one of four subtypes. The diagnosis & treatment of benign paroxysmal positional vertigo (BPPV), which is the most common cause of vertigo, will be emphasized. Video clips will be used to demonstrate various diagnostic tests (e.g. Hallpike test, head thrust test) & various therapeutic maneuvers (e.g. Epley maneuver, bar-b-que roll). Turn frustration with this patient complaint into patient & physician satisfaction.
  
  - Describe a systematic approach to categorize a patient’s dizziness into one of four subtypes.
  - Describe the distinction between peripheral & central vertigo in order to maximize patient safety & not miss cerebellar stroke.
  - Discuss how to diagnose BPPV & how to treat it at the bedside.

- **When Weakness Isn't Stroke?**  
  *Faculty: Danya Khoujah, MBBS*
  
  Lack of a standardized approach to weakness in the emergency department, specifically neuromuscular weakness, leads to missed diagnoses, a delay in management, and unnecessary tests and consultations. With improved recognition of the common and dangerous causes of weakness, patients can be treated earlier and managed precisely.
  
  - Develop an organized approach to weakness in the ED, specifically neuromuscular weakness.
  - Recognize common pitfalls in the diagnosis and initial management of a patient presenting to the ED with neuromuscular weakness.
  - Identify the diagnostic tests required for patients presenting to the ED with neuromuscular weakness.
• **Who Needs the LP?: ACEP Connect**  
  *Faculty: Roderick Fontenette, MD, FACEP; Trevor J. Lewis, MD, FACEP; Evie G. Marcolini, MD, FACEP*

  Subarachnoid hemorrhage (SAH) is a potentially deadly but uncommon diagnosis & continues to create debate & discussion. Will a CT or CTA suffice or does the patient need an LP? This ACEP Connect session will equip you with the latest evidence & practical information you need the next time a patient presents with the worse headache of their life.

  - Discuss the best evidence related to tools for diagnosing SAH.
  - Describe how to estimate whether your CT-negative patient has a SAH.
  - Demonstrate how to orally present the relevant data related to SAH & CT results to patients.

• **Whole Lotta Shakin’ Goin’ On: Update on Seizure & Status Management**  
  *Faculty: Roderick Fontenette, MD, FACEP*

  The seizure patient in the ED is always a concern to the physician. Is it a recurrent or first time seizure? Is it noncompliance or a serious intracranial pathology? What is the imaging that should be pursued? What are the latest guidelines for managing the patient with status epilepticus? The speaker will discuss the myriad of questions associated with seizures in the ED in an evidence-based format.

  - Review the latest guidelines from the American Epileptic Society on the treatment of status epilepticus.
  - Discuss indications for laboratory and imaging work-up in the seizure patient.
  - Apply the algorithm for when to initiate anti-epileptic therapy in the ED.