### 2022 Symposium Schedule With Course Descriptions

Friday, October 14, 2022

\* 8:30 - 12:30 \*

#### SWOT-Analysis Richard Van Der Wall, EMT

By the end of this course, students will have the basic understanding of what SWOT analysis is, when to use it and how to conduct one. Students will also have an under-standing of the three phases of strategic planning.

9:00 - 10:30 am

## Lethal Weapon....Are You Bagging the Life Out of Your Patients? Jon Politis, MPA, NRP

We used to think the basic skill of ventilation was simple and uncomplicated... or, just "bag em". Come to find out successful ventilation and oxygenation is deceptively complicated in how it can impact blood flow, blood chemistry, cerebral perfusion, and ultimately patient outcomes. This presentation is a "back to basics" presentation on the "ABCs" of ventilation and oxygenation based upon current resuscitation science. [JEMS feature article]

### Sepsis is Seriously Sick- Rapid recognition saves lives.

#### Nancy Magee, NREMT, EMSI

More than 80% of sepsis cases originate outside the hospital setting. If rapid recognition and treatment is not started in the pre-hospital environment, many of these patients will die as their dysregulated, out of control immune response to infection overwhelms the body and causes dysfunction in multiple organ systems

In this session we will review the pathophysiology of sepsis, red flags, assessment strategy, screening tools and sepsis alerts.

## Pharmacology 101 for EMTs Alfred Low-Beer, JD, NRP

This presentation will focus on three areas: 1) The medications that EMTs can administer; 2) The medications used by paramedics; and 3) The common medications taken by patients that EMTs may encounter. In the first area we will briefly review each medication's action, indications, contraindications, potential adverse effects and how to deal with them. We will also review the State protocols for their administration and provide interesting details of the medication that were likely not discussed in EMT training. Since many medications in this group work because of their effect on the autonomic nervous system we will review the role of the autonomic nervous system and its role in the health of individuals. In the second area we will focus on the medications commonly carried and administered by paramedics in New Jersey. We will categorize them by use and action and will explain their use. We will also

discuss medications not carried by paramedics on a routine basis. In the third and final area we will review medications that patients commonly take. We will again categorize them, indicate what they do and why a person may be taking them. We will also review the naming of medications, i.e., trade name vs. generic name vs. chemical name. Finally, we will review common medications that are taken illicitly.

### Risk Management for EMTs Justin Eberly, MPA, CTO, NRAEMT

The purpose of this seminar is to provide a broad perspective on areas that are often neither thought about nor emphasized during daily operations. Risk management strives to minimize the adverse effects of losses in an organization, which can mean the difference between organizational success and failure. The goal of this seminar is to better understand what you can do to better protect yourself and your organization.

11:00 - 12:30

## Five Sexy Airway Secrets Jon Politis, MPA, NRP

Basic airway management isn't so basic... nor easy! Do you know the secrets of basic airway management? Like using nasopharyngeal airways, PEEP valves, nasal cannulas at high flows, high performance BVM and giving a high-performance CPAP treatment? This presentation will get you to rethink what you thought you knew about basic airway management and non-invasive ventilation!

## I'm still in here... *Understanding and Responding to People with Dementia* Nancy Magee, NREMT, EMSI

Alzheimer's Disease is the most common form of dementia. It is a progressive, debilitating and ultimately fatal disease. Both Alzheimer's disease and other forms of dementia cause problems with memory, thinking and behavior, and although the terms are often used interchangeably, they are not the same. Despite common misconceptions, Alzheimer's disease is not a normal part of aging. As diagnoses continue to rise, recognition, treatment and prevention have become a priority.

EMS providers are frequently called upon to deal with, and transport patients with altered mental status who have previously been diagnosed with dementia. Understanding the underlying physiology of these diseases, their causes, and progression is critical to a healthcare provider's ability to respond appropriately and compassionately. Therapeutic communication techniques, support of family and other caregivers, and breakthroughs in understanding the underlying causes of these terrible and sometimes avoidable conditions are the heart of this discussion about some of the most vulnerable patients EMS may encounter.

#### **Fundamentals of Critical Incident Stress Management Ryan Tierney**

The goal of this session will be to familiarize participants with critical incident stress and empower them to recognize the signs and symptoms which are unique to first responders. At the conclusion of the session, participants will have the opportunity to participate in an

instructor led mock critical incident debriefing. Participants will learn how to recognize critical incident stress, develop an understanding of coping strategies, understand the goal of critical incident stress management, and learn when and how to contact the Apollo Team (or a similar organization).

## Selecting & Training Competent EMS Vehicle Operators Justin Eberly, MPA, CTO, NRAEMT

Every year EMS agencies continue to be involved in vehicle crashes involving EMS vehicles. Too often these crashes result in debilitating or even fatal injuries to the responder or to civilians. This begs the question: Are we providing the services we have pledged to the public we serve if we can't get to the scene in a safe and proficient manner? The safe operation of these vehicles, particularly during emergency response, depends greatly on the ability and skills of the driver. Effective driver selection, qualification, and requalification are an essential component of a comprehensive emergency vehicle driver training program.

\* 1:30 - 4:30 \*

### "Can Someone Help Install This Car Seat?" Pediatric Transportation Jackie Stackhouse-Leach, EMT, Child Passenger Safety Technician / Instructor

We will take a quick look at what NHTSA recommends for safe pediatric transport, with an emphasis on how a conventional car seat works in a crash. Appropriate harness and chest clip positioning will be discussed. A variety of conventional seats will be on hand to demonstrate methods of adjustment and foster a better understanding of all the moving parts.

1:30 - 3:00pm

## Bleeding Like a... Current Concepts in Hemorrhage Control Jon Politis, MPA, NRP

From every armed conflict has come advancements in emergency medicine and the war in the Middle East is no different. From hemostatic agents to wound packing and modern tourniquets how we manage external bleeding has changed considerably. Even the reliance on the "time honored" pressure point has changed. This presentation is a review of the why, when, and how of modern hemorrhage control and its use in modern civilian EMS.

## *Here's your \*Sign\*:* Understanding Patient Presentation, not reciting eponyms!\* Nancy Magee, NREMT, EMSI

"Signs, signs, everywhere there's signs. \*\*\*\* up the scenery, breakin' my mind Do this, don't do that, can't you read the sign!" Those lyrics of this song from the early 1970's can easily be applied to the frustration felt by EMS providers who are continually tasked with memorizing or referencing obscure names associated with the signs and symptoms of a myriad of ailments. Does memorizing the name of a physician and a set of symptoms really

help with learning and recall? Or does a plainer language approach create a better understanding and thus greater competency for prehospital providers? Join Nancy (who hates acronyms, too!) in an informative and pragmatic discussion of what really matters regarding "signs" such as Grey Turner, Levine's, Battles, Russels, Cullens, and more. \*Note: Merriam Webster defines an eponym as: a person after whom a discovery, invention, or place is named or thought to be named.

### Recognition and Treatment of Anaphylaxis

#### Nakhil Jain, DO

Anaphylaxis can often be missed due to not meeting a classic "constellation of symptoms". Often there is question when a patient should be treated with epinephrine given uncertainty or stability of patient presentation. This session aims to go over the etiology of anaphylaxis on a molecular level, manifestations and recognition of systemic symptoms, and treatment of anaphylaxis or suspected anaphylaxis with epinephrine in the prehospital setting.

### Peer Support: The Purpose, Value and Opportunity Richard Van Der Wall, EMT

The purpose of this course is to help first responders to be able to understand the purpose of supporter and the power that it brings to self-motivation. By the end of the course, students will be able to identify what peer support is, how to identify if someone needs peer support, and where to find local peer support resources.

3:30 - 5:00 pm

### Patient Care Where Your Ambulance Won't Go...Introduction to Wilderness EMS Jon Politis, MPA, NRP

Off road or back-country EMS is a different "ball game" and requires an EMT to think differently about response, rationing of care, the method, speed, and relative risks of transportation. Trying to respond to a back-county emergency with a standard EMS response can cause major problems for the patient and rescuers. This presentation provides an overview of the response, assessment, patient care, and transportation considerations for back-country rescue -- essential for any EMS provider thinking about going beyond the road.

#### Clogged, Leaky, and Broken Pipes- When the plumbing is the problem. Vascular Disorders

#### Nancy Magee, NREMT, EMSI

When the plumbing is the problem, EMS providers must quickly recognize typical and atypical symptoms, understand the pathophysiology of the disease to effectively manage treatment, and identify the source of the problem to facilitate the continuum of care for some of our most time-sensitive and critical patient encounters. Vascular disease includes any condition that affects your circulatory system, and vascular diseases, specifically of the arteries, continue to be one of the major contributors to death in the United States. In this session we will review common vascular problems such as MI, stroke, PE, DVT, AAA, and peripheral artery disease, as well as other rare and often debilitating lesser-known genetic conditions.

## Enhancing the Conversation Dr. Corinne Espinosa, DO

The structure of the history and physical assessment is standardized across the field of medicine. This conversa5on pathway is a language used by most providers to elucidate the most important aspects of a pa5ent's clinical course. While most practitioners master this skill over the course of many pre-professional years, it has failed to become a mainstay in the educa5on of pre-hospital providers. Our goal is to develop and provide a structured approach and educa5onal founda5on for the delivery of medical informa5on by our pre-hospital providers.

### Special Needs Patients Melissa Padulsky, EMT(I), AAS

Special needs patients come in all shapes, sizes, and needs. They can be anyone who has a physical disability, mental disability, or someone who is dependent on technology to survive. We don't always know where you will find these patients; they can be home, in a group home, assisted living, or out and about in the community. Assessing and treating these patients can take patience and time. We must figure out how to communicate with them or caregivers to best assess their needs and how to manage them.

\* 7:30 – 9:30 PM \*
Keynote Address
Dr. Christine Greiss
Prain Injury Alliance of N

Brain Injury Alliance of NJ

Dr. Greiss will review the pathophysiology of brain injuries, barriers to function, their diagnosis and both the immediate and long term management.

Saturday, October 15, 2022

\* 8:00 – 12:00 \* 5 Minutes to Help Richard Van Der Wall, EMT

The opioid epidemic facing this country is a well-known, well-documented public health crisis. It is impacting individuals and families by the tens of thousands, and there are likely very few people in New Jersey who do NOT know at least one person whose life has been touched. As you well know, on the front lines of this epidemic are first responders of all types: Paramedics, EMTs, Fire and Law Enforcement responding to opioid overdoses on a daily basis, often reviving the same individual multiple times in just days or even hours. The number of patients who refuse transport or are transported but leave the hospital prior to being registered, has been estimated at over 60% in some areas of the state. In these cases, the first responder is the only medical professional those patients will see.

We are all aware that nothing changes if nothing changes. In an effort to encourage overdose victims to consider assistance, Five Minutes to Help was envisioned by the NJ Department of Health's Office of Emergency Medical Services. The goal: to arm New Jersey's first

responders with new knowledge and communication skills that can be applied on the scene, post-overdose reversal, to encourage patients to seek help for their addiction and to increase their awareness of available recovery resources in their communities.

Successful application of the concepts taught in this curriculum has been well-documented in many health and counseling environments. However, applying it on the scene of a post-overdose scenario is new territory. Given the expansiveness of this epidemic, we know that compassion fatigue may be significant and that implementation may require not only a change in the culture of agencies, but also a change in the attitudes, beliefs and behaviors of individual responders. Thank you for participating in the effort to do so.

#### 8:00 - 9:30 AM

## Maximizing the Platinum Ten Minutes Jon Politis, MPA, NRP

Getting off an emergency scene in ten minutes or less is a lot easier said than done. A lot of the things we do take time, and some take more time than others! What are some of the tricks of the trade that can be used to help you move faster? Are there better ways to organize, to select more appropriate procedures? This presentation will cover techniques and "tricks of the trade" to help all levels of EMS providers get off the scene faster.

#### **SPLINTING:**

### The right tools for the job: No more "Arts and Crafts" splinting for pre-hospital patient care!

#### Nancy Magee, NREMT, EMSI

"There is nothing so useless as doing efficiently that which should not be done at all." Peter Drucker

Is utilizing cheap linen cravats, cardboard, and miles of roller gauze the best practice for treatment of patients with orthopedic injuries?

Even as EMS embraces parting ways with "The way we've always done it," there are many providers who balk at the idea of trying new products and techniques for stabilization of traumatic injuries.

In this session we will discuss the purpose of splint application, including backboards and cervical collars, explore the proliferation of new products (the good, the bad, the ugly), and why using an item made for a specific purpose is usually more efficient and effective than the way our old school "arts and crafts" training taught us.

## **Understanding LVO and Applying RACE Alfred Low-Beer, JD, NRP**

The State of New Jersey has adopted Rapid Arterial oCclusion Evaluation (RACE) as a method of evaluating and scoring the severity of suspected stroke patients by EMS providers. It helps identify those who may be suffering from a Large Vein Occlusion Stroke so that informed decisions can be made about which facility a patient should be transported to, and it provides a method of providing information to the receiving facility before the patient arrives at the facility. This presentation will review the pathophysiology of a stroke. It will then explain

what an LVO is and why it is important to identify them early. It will then describe how to accurately perform a RACE and score possible stroke for the determination as to the likelihood it involves an LVO. Finally, it will cover how the scoring results from a RACE can be used by BLS providers to improve patients' outcomes, especially in determining which facility a patient should be transported to and how to provide critical information to the facility prior to arrival.

#### **Not So Shocking**

#### Constantine Baltzis, BS, EMT

This class takes a closer look at the pathophysiology of shock and helps responders know what to look for in patients to identify shock. We will go over the different types of shock as well as the different stages of shock. By better understanding what is going on in the body during shock we can more effectively treat it. Finally, we will examine treatments for shock and evidence-based methods for increased patient survival.

10:00 - 11:30 am

### Care of the Entrapped Patient Jon Politis, MPA, NRP

Critically injured patients who are entrapped are some of the most difficult to care for: the ABC's, temperature control, analgesia, sedation, and extrication. The essence of pre-hospital care is the treatment of patients in these circumstances, but many providers today understand little about this type of "rescue" medicine. This presentation is an in depth look at caring for patients who are entrapped and essentials of packaging and removal.

[feature story published in IEMS, April 2009]

### Basics of Trauma Triage: Principles and evidence-based guidelines.

#### Nancy Magee, NREMT, EMSI

In the US, trauma is the leading cause of death in children and adults aged 1-44. EMS providers must determine the severity and type of injury and determine which hospital or specialized facility would be most appropriate to meet the needs of the patient. This is done through a process called "field triage"

Accurate field triage can increase odds of survival by more than 25%.

In this session we will review rapid assessment and use of resources, trauma level designations, and evidence-based guidelines and review the recommendations of the CDC, NHTSA, and ACEP in addition to NJ state protocols.

### EMS Response to Children with Special Healthcare Needs Matt Nicosia, NREMT

In depth course reviewing the pathophysiology of EMS Management of Common Chronic Pediatric Illnesses, Traumatically Disabled Children, Neurologic Diseases, Hematology and Oncology Diseases, and Musculoskeletal Disorders.

Navigating the Aftermath of a Pandemic Melissa Padulsky, EMT(I), AAS

It had been predicted that a pandemic would occur for years based on history. Until we lived through one, we could never truly prepare for it. Now that we are coming out on the other side of it, there is still a lot to navigate: burnout from seeing a lot of sick patients, short staffing, and all the emotions that came with a pandemic. Some providers took a step back either due to getting sick themselves or with concern for their own health issues or those of their family. Others that no longer could ride but wishing they could be on the front lines. Now facing the decision of do we stay in the industry that we love to hate or continue in our medical career despite everything we saw and dealt with the last 2 years.

#### 1:30 - 3:00 pm

## All tied up: Restraining the out-of-control patient Jon Politis, MPA, NRP

Restraining patients is "risky business" for all EMS providers. Often the request to restrain a patient is in the context of a police incident where a patient must be transported for evaluation after being "tased". Sometimes, restrained patients die while in restraints enroute to the hospital. This presentation reviews the common causes of "excited delirium", how tasers work, risk factors for sudden death while restrained, and the EMS "restraint continuum". This presentation also discusses NAEMSP guidelines for EMS restraint. It is suitable for BLS and ALS personnel.

# YOU ATE WHAT?! Tide Pods, the Cinnamon Dragon and other self- inflicted (and sometimes unintentional) poisoning calls.

#### Nancy Magee, NREMT, EMSI

In America, fads involving the ingestion of strange objects or substances are nothing new. In the 1930's, swallowing goldfish was the hot trend for attention-seeking high school students. But more recent challenges are becoming far more dangerous and sometimes deadly. What's going on out there? Who is participating? How do we treat these patients? In this session we will discuss what to expect if your patient has participated in the Tide Pod Challenge, the Cinnamon Dragon Challenge, Condom Snorting, Butt Chugging alcohol, and other disturbing games where there are no winners.

## EMS Response to Civil Unrest Matt Nicosia, NREMT

This course is designed to prepare fire/EMS responders with some basic tools and information needed to develop or assess your agencies, as well as Civil Unrest and Violent Protest guidelines and procedures. Topics also include response issues and safety guidelines.

### Pediatric Medical Emergencies Melissa Padulsky, EMT(I), AAS

Pediatric medical emergencies are not always the same as adult emergencies. Kids are more respiratory dependent and more likely to have respiratory issues. They are also more prone to seizures, fevers, dehydration, and sometimes diabetes. This class will discuss those issues, how to assess children while gaining their confidence, and how to properly treat these kids while keeping them and their parents calm

## Staying Alive...Situational Awareness in Emergency Operations Jon Politis, MPA, NRP

Being aware of the situation around you and understanding its implications is the foundation to assessment and decision making. Unfortunately, key decisions are often made for all the wrong reasons or because people are simply unaware of the consequences. This hard-hitting presentation uses a series of real case studies to make participants aware of the dangers involved in numerous rescue environments and crucial decisions that rescuers must make.

#### If I only had a brain... (brain function & injury)

Nancy Magee, NREMT, EMSI

If I only had a brain... I'd unravel every riddle, for any individual, in trouble or in pain...

Sounds like the Scarecrow from the Wizard of Oz wanted to be an EMT!

The brain is the most complex organ in the human body, serving as the center of the nervous system. It is the foundation of our intelligence, the interpreter for all our senses, and the keeper of all the qualities that make us uniquely human. The fact is that many EMS providers have had little education on the marvel the brain because the focus of EMS education has been primarily on illness and disease. In this session we will review brain anatomy and functions, how the healthy brain works, how to keep it healthy and what happens if we can't-or don't.

### All That Wheezes is not Asthma Bryan Fischberg, NRP

This well-known ALS saying introduces the concept of differential diagnosis to EMT-Bs. Causes of and distinctions between bronchospasm, bronchoconstriction, and small airway obstruction will be covered.

### Crime Scenes for the EMT Melissa Padulsky, EMT(I), AAS

EMTs are often called to respond to a crime scene to treat patients. However, they may have little training on how to manage those scenes, how to properly collaborate with police officers to help gain access and not interfere with evidence more than necessary, how to safely treat patients, and how to constantly maintain provider safety in not-so-ideal circumstances.

Sunday, October 16, 2022

9:00 - 10:30 am

Mastering Triage!
Jon Politis, MPA, NRP

All EMTs are supposed to know how to triage people, but most are very rusty about how to do it. The new national standard is evidence-based SALT triage. This session covers the principles of triage, conventional and SALT triage, and how to use tagging systems. It also includes two triage drills to involve the audience participants and have them practice what they have just learned.

### EMS Response to Specialized Facilities: Nursing homes, Group Homes Nancy Magee, NREMT, EMSI

EMS is called to specialized facilities for emergencies of every type: emergent, behavioral, traumatic, and "unscheduled transfers". These facilities are the home of every "special population" we treat on a regular basis: the elderly, dementia patients, the developmentally disabled, TBI victims, autistic people, the mentally ill, addicts, and patients with chronic disability or illness who either cannot be cared for at home or have no willing caregiver there. These facilities are often short-staffed, underfunded, and subject to regulatory standards and requirements that may affect access to information and destination decisions. Understanding these populations and the needs of the staff is critical to providing these patients with the care they need and deserve, and respect is a two-way street. In this session we will review case studies from 2 group homes -- an assisted living facility with tiered levels of care, and a suburban SNF. We will review multiple emergency calls and consider response from the perspective of the patients and the staff and discuss ways to develop standard operating guidelines and best practices for agencies who respond to these calls.

### Bryan Fischberg, NRP Snapshot of Cardiac Arrest Science

This lecture commemorates World Restart a Heart (WRAH) Day, annually celebrated on October 16. "Working the code" is one small part of the pie when it comes to the management of cardiac arrest, in or out of the hospital. This presentation will give a glimpse into the evidence-based world of adult cardiac arrest prevention, risk, management, aftermath, and research.

#### Tai Chi on Duty

#### Jennifer Steffner, LMT, RYT-200 and Jennifer Schwester, BA, RYT-200

This session will outline easy-to-learn and effective Tai Chi principles to improve health and vitality both on and off duty. Participants will learn and practice posture, breath, movement, and self-care techniques to reduce stress, enhance relaxation, and support self-regulation. Tai Chi will assist participants in building mental and physical strength, increase workforce effectiveness, reduce injury, and improve stress resiliency.

11:00 - 12:30

### Bloody Sewage....Understanding and responding to Sepsis Jon Politis, MPA, NRP

Sepsis is a major cause of death, especially of the elderly! This presentation will explain the evolution and effects of an infection in the bloodstream and how it causes septic shock.

Concepts of SIRS, sepsis and septic shock will be covered along with early recognition and management of sepsis.

#### Left Behind: Caring for the Living when a Patient Dies.

#### Nancy Magee, NREMT, EMSI

Because EMS education and everyday conversations focus on rescues and "saves," providers of any level of education or experience may be unprepared to manage the emotionally charged scenes where a life ends, often unexpectedly, and sometimes violently. From death notifications to advance directives, we will talk about how to provide therapeutic communication and compassionate care when dealing with a loved one's response to normal dying, and the shock, anger and hysteria that can be encountered in family members and witnesses to sudden, traumatic injuries and fatalities. We will also consider the mental and emotional toll these calls inflict on EMS responders, and how to deal with feelings of self-doubt, anger or disappointment and the ghosts that often linger long after the call is over.

### Service Dogs and EMS

### Gerry McEntee, MS, MICP, EMT (I)

Have you ever encountered a patient who is accompanied by a Service dog? Did you know what the appropriate way to handle the dog is? The Seeing Eye is no longer the only agency employing the canine as a service companion. Be it for seizure-alert, Dogs for the Deaf, ability assistance, or one of many other jobs – an increasing number of dogs are with our patients, and we need to know how to address them.

We will look at how several sponsoring agencies suggest you should handle the dog and the patient. Additionally we will discuss actions to be taken in the event of MCIs and evacuations.

#### **Mindfulness on Duty**

#### Jennifer Schwester, BA, RYT-200 and Jennifer Steffner, LMT, RYT-200

In this session, participants will learn and practice physical and mental interventions to recognize and mitigate the effects of daily stressors. These easy-to-learn tools and techniques will reduce negative responses to stress, build resiliency, and cultivate self-compassion. These skills are easily adapted for use while on duty and will assist in transitioning from work to home. By incorporating mindfulness skills into daily routines, participants will increase work effectiveness and safety, as well as support their health and well-being on the job and beyond.