2018

AANEM Annual Meeting Planning Guide

Washington, DC | Oct. 10-13, 2018

American Association of Neuromuscular & Electrodiagnostic Medicine

Including sessions by the Hereditary Neuropathy Foundation, Myasthenia Gravis Foundation of America, and Peripheral Nerve Society
This 84-page supplement to Neurology Reviews includes articles of clinical interest on a host of rare disease topics, including Batten disease, CTX, muscular dystrophy, Lennox-Gastaut syndrome, Huntington’s disease, CADASIL, Hurler syndrome, and much more.

www.neurologyreviews-digital.com/neurologyreviews/nord_supplement_0318
President’s Message

Can you tell us about the theme of this year’s meeting?
I am very excited about the theme of this year’s meeting – precision medicine. For years, we have heard about coming therapies in neuromuscular medicine for untreatable diseases. As clinicians, we have spent years talking with patients who have untreatable/incurable diseases. The hope was always down the road. But now we are in an unprecedented era in medicine with the arrival and approval of a number of new therapeutics. This brings a whole new set of challenges that we are just starting to deal with as clinicians. This is a fantastic opportunity to join our colleagues from across the country and beyond to discuss how we best meet our patients’ needs as we struggle with the implementation of precision medicine.

Why are you looking forward to the 2018 AANEM Annual Meeting?
The AANEM Annual Meeting is among my favorite meetings to attend. Over the years I have formed strong friendships with colleagues who have a similar practice to mine and face similar issues. It is a great time for collegiality and networking. The educational content of the meeting is clinically meaningful, relevant to my day-to-day practice, and unmatched in quality. The meeting also provides me with the opportunity to share my research and discuss research opportunities with my peers from other institutions. Finally, it is small enough to still offer that intimate experience with the faculty yet large enough to attract the leaders in the field.

Why are you excited about the 2018 plenary speakers and their topics?
The invited speakers are worldwide leaders in the development of novel neuromuscular therapeutics and will share their expertise on how to translate this into clinical practice. The speakers will address ethical questions on how to pay for medications and how to support our patients.

What recommendations do you have for individuals who may be attending the AANEM Annual Meeting for the first time?
- Prioritize your objectives.
- Look to a mentor or colleague who has previously attended the AANEM Annual Meeting for guidance.
- Take advantage of the educational offerings (both sessions and workshops). These are exceptional educational opportunities in electrodiagnostics, neuromuscular, and musculoskeletal medicine that you simply will not get at any other meeting.
- Put yourself out there and introduce yourself to the faculty. Discuss your goals and career aspirations.
- Take advantage of the AANEM resources available to assist you.
- Network … get involved … and don’t forget to do a little sightseeing while you’re in DC!
For me, the AANEM Annual Meeting represents a golden opportunity for learning and exchanging knowledge and expertise with other neuromuscular specialists across the country and even the globe.

~ Mohamed Kazamal, MD
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Precision Medicine

The following speakers have been chosen to share their expertise as it relates to the plenary theme: Precision Medicine in Neuromuscular and Musculoskeletal Medicine. As Eric J. Sorenson, MD, AANEM President, stated earlier in this guide, these individuals are “worldwide leaders in the development of novel therapeutics and will explain how to translate this into clinical practice.”

After attending the plenary sessions, attendees will be able to (1) explain the pathophysiology of NM diseases in reference to new and novel therapeutic targets; (2) describe the drug development pathway leading to the present day novel therapies; (3) identify the impact on EDX testing on achieving proper NM diagnoses; (4) relate the social and societal impact of expensive novel therapies for rare NM diseases; and (5) differentiate the emerging rehabilitative challenges of progressive and fatal diseases as they transition to chronic conditions.

Wednesday | 3:45 pm - 5:30 pm

Orphan Drug Pricing – A View from the Trenches

A. Gordon Smith, MD
Chair of Neurology
Virginia Commonwealth University

The AANEM Business Meeting will be held at the beginning of this session.

Thursday | 10:00 am - 12:00 pm

RNA-targeted Mechanisms and Therapeutics for ALS
Olney Lecture

Timothy M. Miller, MD, PhD
David Clayson Professor of Neurology
Washington University

ALS and Related NM Diseases in the Precision Medicine Era
Lambert Lecture

Matthew B. Harms, MD
Associate Professor of Neurology
Department of Neurology
Columbia University
FDA Regulation of Cell Therapy

Wilson W. Bryan, MD
Director, Office of Tissues & Advanced Therapies
Food and Drug Administration

From Assessing Evidence to Determining a “Fair” Price: How Should the Value of New Treatments for Neuromuscular Disorders be Evaluated?
Reiner Lecture

Steven D. Pearson MD, MSc, FRCP
Founder & President of the Institute for Clinical and Economic Review
Department of Bioethics
National Institutes of Health

Saturday | 10:00 am - 12:00 pm

Precision Medicine Therapeutics in Duchenne Muscular Dystrophy: Dystrophin Restoration and Exercise Mimetics

Craig M. McDonald, MD
Professor & Chair
Department of Physical Medicine & Rehabilitation
University of California, Davis

Resident & Fellow Inclusive JumpStart

Wednesday, October 10, 2018
1:30 pm – 5:30 pm

Learn advanced techniques from EMG experts during this small, interactive, hands-on workshop designed for residents and fellows.

Space in this workshop is limited and it generally sells out. Advance registration is now available at a discounted rate of $25 through August 3.
Registration Options

Online registration is preferred and allows you to view real-time session availability. Register at www.aanem.org/meeting.

Online registration deadline: September 25, 2018.

Fax
Fax the enclosed insert to: 507.288.1225
Confirmation will be sent to you within 2 - 3 weeks.

Mail
Mail the enclosed insert to:
AANEM
2621 Superior Drive NW
Rochester, MN 55901
Confirmation will be sent to you within 2 - 3 weeks.

Onsite
Tues. 6:00 pm – 9:00 pm
Wed. 7:00 am – 6:00 pm
Thurs. 7:00 am – 6:00 pm
Fri. 7:00 am – 4:00 pm
Sat. 7:00 am – 10:00 am
Save $75 - Register by August 3, 2018

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<tr>
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<th>Early Bird</th>
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<th>Onsite</th>
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<tr>
<td><strong>Full Attendance (Oct.10-13)</strong></td>
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<tr>
<td>MEMBER</td>
<td>6/27 - 8/3</td>
<td>8/4 - 9/25</td>
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<tr>
<td>Physicians</td>
<td>$625</td>
<td>$700</td>
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<tr>
<td>Residents &amp; Fellows</td>
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<td>Technologists, Collaborators, Researchers</td>
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| **NONMEMBER**                | 6/27 - 8/3 | 8/4 - 9/25 | 10/9 - 10/13 |
| Physicians                   | $875       | $950     | $1,025 |
| Residents & Fellows          | $500       | $575     | $650   |
| Technologists, Collaborators, Researchers | $500   | $575     | $650   |

| **Friday-Saturday Attendance (Oct.12-13)** |         |         |        |
| MEMBER                                    | 6/27 - 8/3 | 8/4 - 9/25 | 10/9 - 10/13 |
| Physicians                   | $300       | $375     | $450   |
| Residents & Fellows          | $200       | $275     | $350   |
| Technologists, Collaborators, Researchers | $200   | $275     | $350   |

| **NONMEMBER**                | 6/27 - 8/3 | 8/4 - 9/25 | 10/9 - 10/13 |
| Physicians                   | $425       | $500     | $575   |
| Residents & Fellows          | $300       | $375     | $450   |
| Technologists, Collaborators, Researchers | $300   | $375     | $450   |

Guests registration is available for $25.

Join AANEM to receive discounted registration fees & many other benefits.
For membership info, visit aanem.org/membership.
Plan Your Stay

Where is the meeting?
In the Washington, DC area at the Gaylord National Resort & Convention Center.

- Only waterfront resort in the DC area (located on the Potomac River)
- 7 restaurants, including a rooftop lounge
- Indoor pool and whirlpool
- 24-hour indoor fitness center
- Run, walk, or cycle on the Woodrow Wilson Bridge Pedestrian Path
- Onsite shopping
- Full-service spa
- 19-story glass atrium with fountain shows in the evening
- Free bus transportation throughout National Harbor, 11 am - 4 am daily

Visit www.aanem.org/meeting for a link to the hotel website.

Can I make hotel reservations now?
Yes. Book by August 1, 2018, and save $38 per night on the single occupancy rate. The special room rate on Deluxe Guest Rooms for AANEM is $269 per night plus tax.

Room blocks fill up fast, so book early. Reserve online at www.aanem.org/meeting. You must book online to receive this special rate.

What types of hotel rooms are available in the room block?
Deluxe guest rooms contain either 1 king size bed or 2 double beds. Each room features 448 square feet with workspace, sitting area, oversized bathrooms, high speed internet, and wireless connectivity.

Is smoking allowed at the hotel?
No. The Gaylord National Resort & Convention Center is smoke-free.

Do I need to book my own airfare?
Yes.
What airports are available in the Washington, DC area?

- Ronald Reagan Washington National Airport (DCA) - 8 miles away from the Convention Center
- Washington Dulles International Airport (IAD) - 35 miles away from the Convention Center
- Baltimore/Washington International Thurgood Marshall Airport (BWI) - 45 miles away from the Convention Center

Does the hotel provide a shuttle service?

No. Alternate transportation options are below:

- Rental car
- Taxi
- Uber or Lyft
- SuperShuttle - booking.supershuttle.com

Are discounted rates available on rental cars?

Yes. Hertz is offering discounted rates for AANEM meeting attendees. For reservations, go to www.hertz.com and enter convention number CV022Q8983.

Is parking available at the hotel?

Yes. There is a $30 daily fee to park onsite at the Gaylord National Resort & Convention Center. The daily fee for valet parking is $45.

Outside of the AANEM Annual Meeting, what else can I do in the Washington, DC area?

The possibilities are endless. Suggested activities and attractions include:

- MGM National Harbor
- The Capital Wheel
- Washington Monument
- Thomas Jefferson Memorial
- Potomac Riverboat Company
- George Washington's Mount Vernon

For an Entertainment Guide, call (301) 965-4000.

Visit washington.org for more attractions.
Get Connected

Speed Networking
Looking for a fun, easy way to network at the AANEM Annual Meeting? Want to build connections with peers, leaders, and other professionals in NM and EDX medicine? Register to attend our speed networking event (space is limited). Speed networkers will make approximately 10 - 11 connections during the session. Don’t forget your business cards!

President’s Reception
The President’s Reception is the official kickoff event of the meeting each year. Socialize with attendees and exhibitors while enjoying snacks, wine, and refreshments.

Abstract Poster Viewing and Presentations
Abstract research posters will be on display in the abstract poster area from Wednesday at 8:00 am to Friday at 1:00 pm. Stop by after the Thursday and Friday plenary sessions to meet the authors and discuss their research.

Abstract Award Reception
Enjoy an evening celebrating research! Socialize with abstract authors while enjoying snacks, wine, and refreshments. Golseth, Best Abstract, and President’s Research award-winning authors will be available to discuss their research.

EMG Tonight
EMG Tonight is an interactive, entertaining event formatted like the old Tonight Show with Johnny Carson. It is meant to be a lighthearted look at EMG with lots of laughs. A variety of “guests” will appear through the duration of the “show” to share their wisdom on various EMG topics. All are encouraged to join this event for some fun and camaraderie. Drinks and sweet treats will be available.

Exhibit Hall
Want to learn more about the products that make our industry unique? Take the opportunity to stop by the exhibit hall during the 2018 AANEM Annual Meeting to see the latest innovations in our industry and learn more about solutions to help treat your patients. The exhibit hall is a great place to meet and network with all types of industry professionals including representatives from equipment, technology, and pharmaceutical companies as well as other industry service providers.

Social Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Speed Networking</td>
<td>Wednesday</td>
<td>3:00 pm – 3:45 pm</td>
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<tr>
<td>President’s Reception</td>
<td>Wednesday</td>
<td>5:30 pm – 7:00 pm</td>
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<tr>
<td>Abstract Poster Presentations</td>
<td>Thursday</td>
<td>11:30 am – 12:30 pm</td>
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<tr>
<td>Abstract Award Reception</td>
<td>Thursday</td>
<td>5:45 pm – 6:45 pm</td>
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<tr>
<td>EMG Tonight</td>
<td>Thursday</td>
<td>7:00 pm – 9:00 pm</td>
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<tr>
<td>Exhibit Hall</td>
<td>Wednesday</td>
<td>5:30 pm – 7:00 pm</td>
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<td></td>
<td>Thursday</td>
<td>9:00 am – 4:00 pm</td>
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<tr>
<td></td>
<td>Friday</td>
<td>9:00 am – 4:00 pm</td>
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A Great Way to Obtain CME/CEUs!

The 2018 AANEM Annual Meeting is an excellent venue for physicians to earn CME and technologists to earn checkpoints and CEUs! A wide selection of free sessions is available and most offer CME/CEU. Almost all of our workshop sessions also offer CME and some offer CEUs.

CME for physicians:
22 (there is also an opportunity to earn 27 Self-Assessment CME)

CEUs for technologists:
22 (there is also an opportunity to earn 4 CNCT Checkpoints)

Self-Assessment CME for Physicians
Member physicians can earn up to 27 FREE Self-Assessment (SA) CME* at the 2018 AANEM Annual Meeting! The following courses will be designated for Part II SA credit toward maintenance of certification. All 5 courses are eligible for 9 SA CME. AANEM will report completion of each SA activity to ABPN and ABPMR. Physicians may only attend 1 SA course per day.

Wednesday, 8:00 am: Basics With the Experts
Thursday, 1:30 pm: Demyelinating Neuropathies
Thursday, 1:30 pm: Interactive Case Based Approach to Genetics and Neuropathology
Friday, 1:30 pm: Entrapment Neuropathies
Friday, 1:30 pm: Emerging Therapies and Controversies

*Free to AANEM members. Nonmember price is $50.

CNCT Checkpoints
Technologists have the opportunity to receive 4 CNCT Checkpoints at the 2018 AANEM Annual Meeting! Technologists can attend the following courses to earn up to 3 Checkpoints toward CNCT maintenance of certification through the American Board of Electrodiagnostic Medicine (ABEM). AANEM will report completion to ABEM. One free checkpoint, for members and nonmembers, is added for attending the annual meeting.

*Self-Assessment Checkpoint:
Wednesday, 8:00 am: Basics With the Experts

*Other Checkpoints:
Thursday, 1:30 pm: Demyelinating Neuropathies
Friday, 1:30 pm: Entrapment Neuropathies
$ave on Session Materials
Pre-order when you register!

2018 Annual Meeting Collection
With so many great sessions being offered at the 2018 AANEM Annual Meeting, it would be impossible to attend every session in person. However, AANEM has a solution - the 2018 Annual Meeting Collection, a digital download of session presentations. The download will include many presentations and presenters’ commentary (as audio of most presentations will be recorded live at the meeting).

Purchasers of the 2018 Annual Meeting Collection will receive CME/CEUs for sessions in which CME/CEU was offered. The link to the digital download will be available approximately 2 weeks after the annual meeting.

The 2018 Annual Meeting Collection contains all of the session presentations, however, it does not include workshop materials. More information on workshop materials is available on the next page.

only $200
pre-order price with registration before 9/25

$300 regular price through 10/13
$450 AANEM member price after 10/13
$780 nonmember price after 10/13
$ave on Workshop Materials
Pre-order when you register!

2018 Workshop E-Bundle
The 2018 AANEM Annual Meeting is offering a variety of workshops, including 13 that have never been offered before! Due to the nature of the workshop setting (e.g. hands-on demonstration session), AANEM encourages in-person attendance. However, if in-person attendance is not possible for all of the workshops you're interested in, AANEM is offering the 2018 Annual Meeting Workshop E-Bundle.

Purchasers of this bundle will receive handouts from the workshops that utilize handouts (40 or more) via a single, downloadable PDF. These handouts contain the teaching points of the workshops.

Workshop CME/CEUs are only available for in-person attendance. Workshop CME/CEUs cannot be obtained by purchasing the 2018 Workshop E-Bundle.

only $50
pre-order price with registration before 9/25

$75 regular price through 10/13
$100 AANEM member price after 10/13
$250 nonmember price after 10/13
# Sessions

**Sessions are included with your AANEM Annual Meeting registration.**

Your registration gives you access to a wide variety of educational sessions related to neuromuscular, musculoskeletal, and electrodiagnostic medicine. We have a diverse group of meeting attendees each year whose learning needs are different. To cover the spectrum, we have sessions on the basics for those in the early stages of their career (or those who just need a refresher!) as well as advanced sessions for seasoned professionals. There is something for everyone! Each attendee can tailor their learning by choosing the offerings most applicable to their practice. Most sessions offer CME and CEUs.

**NOTE:** The following sessions have limited seating and require advance registration: *Challenging Cases Roundtable* and *Bedside Evidence Based Medicine*. If you wish to attend either session (or both), be sure to include them when you complete your registration. Industry Forums also have limited seating; however, no advance registration is required. If interested in attending an industry forum, arrive early to secure a spot!

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# Workshops

**Enhance your learning experience by adding workshops to your registration.**

To customize your meeting experience, you may choose to add workshops to your registration. Workshops are designed for hands-on learning in small groups and are led by experts in the field. Workshops typically feature a specific subject with participants gathered around while the expert teaches a technique or concept. Almost all of our workshops offer CME and some offer CEUs.

To help keep general registration costs lower, workshops are not included with the general registration fee. Check out the great lineup of available workshops and review the insert for pricing information.

**NOTE:** Workshops are held throughout the day on Wednesday and Saturday. They have limited seating and require advance registration. All workshops are open to physicians. Technologists may attend workshops where CEUs are being offered.

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# Social Events

**Social events are included with your AANEM Annual Meeting registration.**

All registered attendees are invited to attend the meeting’s social events which include speed networking, the President’s Reception, exhibit hall, abstract poster presentations, Abstract Award Winners’ Reception, and EMG Tonight. These events do not offer CME/CEUs. Registered guests are welcomed at all social events (except speed networking).
### MGFA Session

The MGFA Medical/Scientific Advisory Board presents a scientific session highlighting research in the area of MG and myasthenic disorders. This session is the premier annual event around the U.S. and world related to the pathogenesis, immunology, diagnosis, and treatment of MG and related disorders of the NM junction. Included in the program will be leaders in MG research from the scientific and clinical areas.

To be announced

### Torsional and Altered NM Anatomy in EDX

(1) Recognize changes in normal anatomy with limb torsion using MSK US. (2) Discuss strategies for assessing post-surgical/traumatic anatomy with high frequency US.

Elizabeth Greer Forrest, MD | Jeffrey A. Strakowski, MD | Faye Y. Tan, MD

### Basics With the Experts

(1) Explain the basic concepts underlying nerve conduction and approach to the study. (2) Conduct and interpret nerve conduction studies in the upper and lower extremities. (3) Use specialized studies including repetitive nerve stimulation, cranial nerve studies, blink reflex, short and prolonged exercise studies in channelopathies. (4) Apply needle EMG for the diagnosis of NM disorders. (5) Identify anomalous innervations and common pitfalls when performing nerve conduction studies. (6) Explain technical factors and important safety considerations affecting the study.

Mohammad Kian Salajegheh, MD | Kelly Graham Gwathmey, MD | Aaron Izenberg, MD | Joseph M Choi, MD

### Hot Topics in Neuromuscular Literature

(1) Appraise several of the most impactful findings in NM literature over the past year. (2) Recognize the clinical value of these studies and their impact in NM patients including: clinical neurophysiology applications, myopathy evaluation, peripheral neuropathy workup, motor neuron disease understanding and neuromuscular junction disorders. (3) Discuss hot topics and groundbreaking work within these different areas of NM medicine. (4) Integrate this emerging knowledge within clinical practice.

Ruple S. Laughlin, MD | Margherita Milone, MD, PhD | A. Gordon Smith, MD | Zachary N. London, MD | Katharine Nicholson, MD

### EDX NM Challenging Cases

Participants will acquire skills to apply and refine the process of diagnostic formulation in NM medicine and clinical EMG and improve patient care. This symposium relies on attendees to provide challenging cases.

Bashar Katirji, MD

### W11A EMG and US Respiratory

(1) Perform phrenic NCSs. (2) Utilize techniques for safe needle EMG of the diaphragm (including US-assisted). (3) Localize and perform needle EMG of chest wall muscles, which are helpful in the diagnosis of respiratory failure. (4) Utilize US for evaluating thickness and contractility of the diaphragm.

Andrea J. Boon, MD

### W18A NM US

(1) Obtain images with transverse and longitudinal transducer positions. (2) Describe how to manipulate basic US instrumentation to include focal depth, Doppler flow, and transducer frequency. (3) Describe how muscle, nerve, and tendon appear with US. (4) Discuss the principle of anisotropy.

Michael S. Cartwright, MD
<table>
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<tr>
<th>Time</th>
<th>Event</th>
<th>Description</th>
<th>Speaker</th>
<th>CME/CEU</th>
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<tr>
<td>8:00 am - 9:30 am</td>
<td><strong>W20A Office-Based Injection Procedures</strong></td>
<td>(1) Describe the principles underlying the safe and effective performance of office-based procedures. (2) Identify contraindications to select office-based injection procedures, identify appropriate patients, prepare and instruct them on what to expect during and after a procedure. (3) Describe and demonstrate commonly performed office-based injection procedures, including trigger-point injections, shoulder and knee injections, bursal injections, carpal tunnel injections, and botulinum toxin injections for migraine and cervical dystonia. (4) Become aware of the complications that may result from office-based injection procedures, how to minimize the chance of complications, and manage complications if they arise. (5) Describe how the use of US to guide needle placement can enhance accuracy and understand when it is most appropriately used as well as its limitations.</td>
<td>Ashish Khanna, MD</td>
<td>1.5</td>
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<tr>
<td>8:00 am - 9:30 am</td>
<td><strong>W27A Repetitive Nerve Stimulation</strong></td>
<td>(1) Perform RNS to shoulder, upper arm, hand, and facial muscles. (2) Discuss sequential examination for detecting NM transmission defects, such as artifacts.</td>
<td>Vettaikorumakankav Vedanarayanan, MD, FRCPC</td>
<td>1.5</td>
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<tr>
<td>8:00 am - 9:30 am</td>
<td><strong>W37A Hands-On Practical Instrumentation</strong></td>
<td>(1) Explain the implications of amplifiers and filters on the biologic waveform. (2) Describe interference in the work environment. (3) Determine how to eliminate stimulus artifact. (4) Discuss the implications of stimulation with both the cathode and anode.</td>
<td>Daniel Dumitru, MD, PhD</td>
<td>1.5</td>
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<tr>
<td>8:00 am - 9:30 am</td>
<td><strong>W46A Paraspinal Mapping and the Evaluation of Lumbosacral Plexopathy/Radiculopathy</strong></td>
<td>(1) Establish a clinical and EDX approach to disorders affecting the lumbosacral roots and plexus. (2) Identify and distinguish findings between lumbar radiculopathies versus disorders affecting the lumbosacral plexus.</td>
<td>Andrew J. Haig, MD</td>
<td>1.5</td>
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<tr>
<td>8:00 am - 9:30 am</td>
<td><strong>W61A US Lower Extremity Nerves and Muscles</strong></td>
<td>(1) Explain optimal transducer frequencies for imaging lower extremity nerves. (2) Identify the tibial nerve at the ankle and knee, the fibular nerve at the knee, and the sciatic and sural nerves using US. (3) Describe the branching patterns of tibial, fibular, and sural nerves in the lower extremities. (4) List expected findings of nerve entrapment as may be seen on US and findings in structures other than the nerve that may be significant.</td>
<td>Steven James Shook, MD</td>
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<td>8:00 am - 9:30 am</td>
<td><strong>W65A Quantifying the NM Exam: QST and Dynamometers</strong></td>
<td>(1) Identify the different types of sensory nerve fibers and sensations they mediate. (2) Discuss applications of QST to the diagnosis of focal and generalized neuropathies.</td>
<td>P. James B. Dyck, MD</td>
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<td>8:00 am - 9:30 am</td>
<td><strong>W67A US-Guided Treatment of Peripheral Mononeuropathies</strong></td>
<td>(1) Describe the technical aspects of US-guided needle placement. (2) Utilize US-guided procedures to treat common peripheral neuropathies. (3) Demonstrate the ability track a needle under real time ultrasound guidance in order to quickly and accurately target a structure through a hands on approach.</td>
<td>John W. Norbury, MD</td>
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<td>8:00 am - 9:30 am</td>
<td><strong>W76A NM US Basic Upper Extremity</strong></td>
<td>(1) Describe basic principles of US imaging and equipment requirement. (2) Demonstrate scanning technique of the median and ulnar nerves, dynamic testing and measurements. (3) Discuss sonographic findings of common entrapment neuropathies.</td>
<td>Elena Shanina, MD</td>
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**Wednesday | October 10**
**W80A Tarsal Tunnel**

1. Identify the contents of the tarsal tunnel.
2. Distinguish the symptoms between plantar fasciitis and tarsal tunnel syndrome (TTS).
3. Compare the potential areas of entrapment in TTS and interpret the symptoms associated with it.
5. Formulate a strategy on needle examination of key muscles in TTS and Baxter's nerve entrapment.

William L. Doss, MD

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**W33A-B You Make the Call: An Interactive Approach to the Skills of EMG Waveform Recognition**

1. Identify the firing patterns of different types of EMG waveforms.
2. Identify the characteristics of a variety of normal and abnormal spontaneous waveforms.
3. Recognize normal and abnormal patterns of recruitment of MUAPs.
4. Recognize and understand the significance of the changes in morphology of MUAPs in diseases.

Includes audience participation and videos of EMG waveforms.

Devon I. Rubin, MD

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**W62W1 NCS Workshop/NCS Case Studies**

1. Perform basic NCSs in the upper extremity and lower extremity.
2. Perform repetitive stimulation.
3. Describe common pitfalls of NCSs.
4. Identify the most common mononeuropathies in the upper and lower extremities.
5. Work through a case and come up with the correct diagnosis. [The session is taught by technologist and physician teams with emphasis on hands-on learning and actual case presentations]

Teresa Spiegelberg, CNCT, R.NCS.T, R.EEG.T, BS | Ann A. Little, MD | James W. Teener, MD

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**Using Technology in Health Care: Sensors and Arm Support Systems for Upper Extremity Function**

1. Describe examples of currently used upper extremity functional outcome measures in NM conditions.
2. Explain the fundamental technological basis for 3D motion reconstruction for upper extremity reachable workspace measure.
3. Summarize the application and utility of kinect-based reachable workspace as outcome measure in NM conditions.
4. Identify future applications of sensor and robotics technology in NM conditions.

Mariska Janssen, PhD | Jay J. Han, MD | Gregorij Kurillo, PhD

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**W02B Autonomic Testing Using EMG Equipment**

1. Perform the two quantitative tests for autonomic function, quantitative sudomotor axon reflex testing and heart rate variability studies.
2. Apply this technique to standard EDX practice where appropriate.

Jasvinder PS Chawla, MBBS, MD, MBA

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**W06B Intraoperative Monitoring**

Discuss the indications, utility, and limitations of somatosensory, motor, and brain stem evoked potentials EEG, EMG, and NCSs as monitors of brain stem, spinal cord, cranial nerve, and peripheral nerve function during posterior fossa, spinal, peripheral, and vascular surgery.

E. Matthew Hoffman, DO, PhD

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**W16B MUAP Quantitation**

1. Discuss the basic composition of the motor unit potential.
2. Identify how the motor unit remodels in NM disorders are reflected in the motor unit potential.
3. Discuss the basics in acquisition and analysis of motor unit potentials.

Paul E. Barkhaus, MD
W45B Cervical Radiculopathy/Brachial Plexopathy

1. Discuss the anatomy of the cervical roots and the brachial plexus.
2. Describe the role of the sensory NCS in the initial localization of axon loss processes to preganglionic versus ganglionic/postganglionic.
3. Illustrate the role of the sensory NCS in localizing focal lesions to specific regions of the brachial plexus (root, trunk, division, cord, terminal nerve).
4. Discuss the role of motor NCS in further localizing the lesion and in defining its severity.
5. Describe the role of the needle EMG in confirming the NCS findings and in defining the temporal features of the disorder (slowly progressive, rapidly progressive, acute, subacute, chronic).
6. Demonstrate this information using illustrative cases.

Ghazala Riaz Hayat, MD

W53B Most Reliable Techniques for CTS EDX

1. Perform the NCS techniques required for the CTS Sensory Index.
2. Design an EDX study for a patient with possible CTS.
3. Recite the most common pitfalls in EDX testing for CTS.

William S. Pease, MD

W55B Myopathies: EDX Approach

1. Discuss the role of EDX testing in myopathies.
2. Identify electrodiagnostic findings in muscle disorders.
4. Use the EDX findings to generate a differential diagnosis.

Elie Naddaf, MD
### History of Electrodiagnosis and NM Diseases

(1) Identify the historical discoveries and the development landmarks of some of the currently available electrophysiologic techniques.

(2) Relate some of the currently well described NM disease conditions to their original descriptions.

(3) Demonstrate the historical evolution of our understanding of the etiology and pathology of certain NM disorders.

Mohamed Kazamel, MD | John C. Kincaid, MD | Jose David Avila, MD

### Cutting Edge US

(1) Explain the most recent advances in NM US.

(2) Apply US skills to diagnose relevant NM conditions.

David Channing Preston, MD | Lisa D. Hobson-Webb, MD | Michael S. Cartwright, MD

### Effective Strategy in a Multidiscipline Clinic

(1) Explain the benefits and challenges in developing and maintaining a multidisciplinary care program for NM disease.

(2) Summarize various financial and staffing models to support a multidisciplinary program in NM disease.

(3) Relate the challenges and opportunities in designing appropriate outcome measures to support the maintenance of a multidisciplinary program in NM disease.

Jeffrey Rosenfeld, MD, PhD

### Ethical Implications in NM Medicine

(1) Describe the current state of ethics in the workplace.

(2) Identify resources for teaching and assessing ethics and professionalism.

(3) Summarize two ethical aspects presently being debated.

To be announced
Active Peripheral Nerve Research presented by the Peripheral Nerve Society

The Peripheral Nerve Society (PNS) is an international organization of physicians and scientists working together to develop and provide the best treatments for people who have peripheral nerve diseases. The PNS encompasses all aspects of the peripheral nervous system, both clinical and scientific, and ranges from electrophysiologic tools for diagnosis to molecular mechanisms of disease and nerve fiber regeneration. Participants will acquire skills to (1) summarize the latest research in genetic neuropathy; (2) discuss mechanisms for recovering from neuropathy; and (3) apply new treatments in neuropathy as they are developed.

Charlotte J. Sumner, MD | Eric Lancaster, MD, PhD | Michael J. Polydefkis, MD

W10C EMG Needle Basics

(1) Utilize electrophysiologic techniques related to needle EMG. (2) Apply a problem-directed approach to the study. (3) Identify insertional and spontaneous activity. (4) Identify the characterization of MUAP morphology and recruitment in normal and diseased states.

Atul T. Patel, MD

W13C Entrapment Lower Limb

Familiarize participants with techniques needed to evaluate and diagnose entrapments in lower limbs. Acquire skills to (1) perform NCSs for peroneal, tibial, medial, and lateral plantar nerves; and (2) identify the appropriate muscles for evaluating lower limb nerve entrapments and appropriate needle placement for EMG examination.

Michael T. Andary, MD, MS

W18C NM US

(1) Obtain images with transverse and longitudinal transducer positions. (2) Describe how to manipulate basic US instrumentation to include focal depth, Doppler flow, and transducer frequency. (3) Describe how muscle, nerve, and tendon appear with US. (4) Discuss the principle of anisotropy.

Francis O. Walker, MD

W22C Skin Biopsy Technique & Applications

(1) Discuss the development of skin biopsy as a clinical technique. (2) Describe its current applications and limitations in clinical practice. (3) Discuss the technique involved in obtaining skin specimens to increase providers’ comfort level in performing this billable procedure in their own office.

David W. Polston, MD

W24C Pelvic Floor EMG

This workshop will demonstrate a common pelvic floor EDX procedure on a male subject in a small group setting. The limited size allows all participants to view the demonstration and ask questions. There will be a discussion session regarding female and male pelvic floor clinical neurophysiology and anatomy. Participants will acquire skills to perform (1) common pelvic floor EDX studies in men; (2) apply their technical ability to perform male pelvic floor EDX studies; and (3) perform pelvic floor neurophysiology.

Andrew H. Dubin, MD, MS

W38C Physical Exam of the Athlete: Cervical Spine and Upper Extremity

Examine an individual and determined if the pain is from the cervical spine, shoulder, elbow, wrist, hand or a muscle and identify the typical athletic injuries to these regions. Participants will (1) determine which structure of the cervical spine is the pain generator, i.e., nerve root, facet joint or muscle; (2) distinguish which shoulder structures are pain generators; (3) determine a diagnostic and therapeutic plan; (4) identify the key elements in a history and physical exam to make a diagnosis and discuss a proper diagnostic work up and treatment plan for the injured athlete; and (5) discuss the differential diagnosis for cervical spine and upper extremity injuries in the athlete. Physical examination maneuvers useful in the diagnosis of radiculopathy and common nerve entrapment syndromes will be determined.

Francis P. Lagattuta, MD
W44C Anatomy & Kinesiology of the Shoulder/Upper Limb

1:30 pm - 3:00 pm
Workshop

(1) Identify the normal anatomy and the normal and abnormal kinesiology resulting from paralysis of key upper limb muscles. (2) Perform the neurological examination on each other to localize root from peripheral nerve lesions. (3) Differentiate winging from serratus anterior versus trapezius muscle weakness. (4) Localize lesions to specific peripheral nerve sites based on the motor and key components of the sensory and reflex examination and integrate with EDX and US findings. Participants are requested to wear short sleeve shirts to facilitate examining each other.

John W. Norbury, MD

1.5 CME

W50C Advanced Autonomic Testing

1:30 pm - 3:00 pm
Workshop

Familiarize participants with 3 quantitative tests of autonomic function using specialized equipment designed for autonomic reflex function testing: (1) sudomotor testing; (2) cardiovagal testing with heart-rate response to deep breathing; and (3) valsalva maneuver testing to evaluate cardiovagal and adrenergic function.

Amanda C. Peltier, MD, MS

1.5 CME

W58C US Upper Extremity Nerves and Plexus

1:30 pm - 3:00 pm
Workshop

(1) Explain the optimal transducer frequency for imaging upper extremity nerves. (2) Identify the median nerve at the wrist, ulnar nerve at the elbow, and brachial plexus using US. (3) Describe normal median nerve mobility and the appearance of ulnar nerve dislocation on real-time US. (4) List the findings of nerve entrapment as may be seen on US and findings in structures other than nerve that may be relevant.

Vanessa Baute, MD

1.5 CME/CEU

W70C Expert US

1:30 pm - 3:00 pm
Workshop

Demonstrate advanced US practices involving challenging and complicated nerves. Workshop also includes measurement techniques of the peripheral nerve in the upper and lower limbs.

Jeffrey A. Strakowski, MD

1.5 CME/CEU

W73C Sonographic Needle Guidance for Carpal Tunnel Injections

1:30 pm - 3:00 pm
Workshop

(1) Explain anatomy of the carpal tunnel and adjacent structures. (2) Discuss approaches for sonographic needle imaging. (3) Compare US-guided and “blind method” injections for treatment of CTS. (4) Distinguish structural abnormalities and common anatomic variations that may affect the procedure. (5) Demonstrate technique of US-guided carpal tunnel injection.

Elena Shanina, MD

1 CME

W74C Performing Arts Medicine

1:30 pm - 3:00 pm
Workshop

(1) Describe the unique considerations necessary for clinical evaluation of performing artists. (2) Articulate the musculoskeletal demands of dance technique and the types of neurologic and musculoskeletal disorders it predisposes to. (3) Assess the dancer-patient for neurologic and musculoskeletal disorders, as well as intrinsic and extrinsic factors which may contribute to injury risk.

Bonnie J. Weigert, MD

1.5 CME/CEU

W75C Chemodenervation Guidance Techniques-EMG, Nerve Stimulation and US

1:30 pm - 3:00 pm
Workshop

(1) Discuss how to use US, needle EMG and nerve stimulation to guide chemodenervation injections using botulinum toxin. (2) Describe the benefits and limitations of each localization technique for chemodenervation procedures. (3) Discuss ways to combine US with EMG/nerve stimulation to maximize ability to target and select muscles for chemodenervation.

Michael C. Munin, MD

1 CME

W82C NCS Basics

1:30 pm - 3:00 pm
Workshop

This workshop is designed to address techniques of performing NCSs of commonly-studied nerves. Participants will acquire skills to (1) place the stimulating and recording electrodes for optimal recordings; (2) adjust the stimulation intensity and duration; (3) adjust machine settings for appropriate recordings; and (4) discuss common technical issues regarding basic NCSs.

Ghazala Riaz Hayat, MD

1 CME/CEU
**Speed Networking**

Looking for a fun, easy way to network at the AANEM Annual Meeting? Want to build connections with peers, leaders, and other professionals in NM and EDX medicine? Register to attend our speed networking event (space is limited). Speed networkers will make approximately 10 - 11 connections during the session. Don’t forget your business cards!

**Plenary 1: Precision Medicine in NM and MSK Medicine**

**Orphan Drug Pricing – A View from the Trenches**

A. Gordon Smith, MD

**President’s Reception**

The President’s Reception is the official kickoff event of the meeting each year. Socialize with attendees and exhibitors while enjoying snacks, wine, and refreshments.

**Exhibit Hall**

Want to learn more about the products that make our industry unique? Take the opportunity to stop by and see the latest innovations in our industry.

**How to Incorporate Genetic Testing / How to Pay for It**

Describe how to utilize an algorithmic approach to ordering genetic tests for patients with suspected hereditary NM disorders.

**MACRA**

(1) Describe an overview of the Quality Payment Program. (2) Identify the four categories under the Merit-Based Incentive Program (MIPs). (3) Identify how EDX and NM physicians can succeed in MIPs. (4) Describe Advanced Alternative Payment Models.

**Chemodenervation**

(1) Explain the principles and practical aspects of chemodenervation with the botulinum toxins in focal dystonia and spasticity. (2) Identify the role of EMG guidance in the recognition of dystonic EMG patterns and choice of candidate muscles for injection. (3) Discuss dosing differences/relationships among available toxins.

Janice M. Massey, MD

**NM US**

(1) Explain how NM US is incorporated into an EDX laboratory. (2) Discuss NM conditions in which US can improve the diagnosis and treatment. (3) Identify the general aspects of billing for NM US.

Francis O. Walker, MD

**EDX Evaluation of CIDP & MMN**

An algorithmic approach for the diagnosis of CIDP or MMN: (1) define the clinical phenotype in the context of the clinical history; (2) identify the EDX findings of acquired demyelination; (3) utilize the validated EDX criteria to ascertain the diagnosis [EFNS PNS]; (4) resort to supportive criteria if #3 is not met. Based on 1-4, CIDP can be diagnosed as typical or atypical [based on the phenotype], and either can be definite, probable or possible [based on the EDX criteria and supportive criteria]. Based on 1-4, MMN classification can be definite, probable or possible [based on the EDX criteria and supportive criteria]. (5) Identify that although the phenotype #1 such as in CIDP is used to classify CIDP as typical or atypical, certainty of the diagnosis, i.e. definite, probable or possible in either CIDP or MMN depends on the EDX criteria #3 with help from the supportive criteria #4 if needed.

Said R. Beydoun, MD

**Diabetic Neuropathy**

(1) Explain the many faces of diabetic neuropathy. (2) Differentiate the treatments for the NM complications of diabetes. (3) Summarize diabetic small fiber and autonomic neuropathies.

Jau-Shin Lou, MD, PhD, MBA
<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>CME/CEU</th>
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<tr>
<td>8:00 am -</td>
<td>1.5</td>
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<td><strong>Evidence Based Medicine</strong></td>
<td>Participants will get an introduction to evidence based medicine and its application in routine clinical care. Gary S. Gronseth, MD</td>
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<td>8:00 am -</td>
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<td><strong>Radiculopathy</strong></td>
<td>(1) Discuss pertinent historical features of lumbosacral and cervical radiculopathies. (2) Explain pertinent physical exam and PE findings in lumbosacral and cervical radiculopathies. (3) Identify optimal EDX examination for lumbosacral and cervical radiculopathies that ensures high diagnostic accuracy. (4) Discuss other diagnostic testing for lumbosacral and cervical radiculopathies. (5) Describe treatment options for lumbosacral and cervical radiculopathies. Peter A. Grant, MD</td>
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<td>8:00 am -</td>
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<td><strong>Small Fiber Neuropathy</strong></td>
<td>(1) Describe the clinical features and compare the diagnostic tests available (QST, skin biopsy, QSART, and cardiovascular reflex test). (2) Discuss the etiology, prognosis, and therapy of small fiber neuropathy. (3) Identify the role of skin biopsy in evaluating treatment efficacy in small fiber neuropathy. Benn E. Smith, MD</td>
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<td><strong>Botulinum Toxin for Pain</strong></td>
<td>(1) Discuss the various painful conditions that have been treated with botulinum toxin. (2) Summarize literature support and limitations for treatment of painful conditions using botulinum toxin. (3) Discuss some of the proposed mechanisms of action of botulinum toxins in painful conditions. (4) Discuss the various techniques used to treat pain with botulinum toxins. Atul T. Patel, MD</td>
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<td>8:00 am -</td>
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<td>1.5</td>
<td><strong>What Reference Values and NCS Techniques Should I Use in My Practice</strong></td>
<td>(1) Discuss how high quality normative data (reference values) are derived. (2) Discuss the normative data taskforce and the results of that effort that identified techniques and reference values for common NCSs that are useful resources for EDX physicians. (3) Demonstrate how easy it is to incorporate these NCS techniques into your practice. Timothy R. Dillingham, MD, MS</td>
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<td><strong>EMG Reports</strong></td>
<td>Discuss how to improve patient care by providing a concise interpretation of EMG data and assessment of their clinical significance for the referring physician. Devon I. Rubin, MD</td>
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<td><strong>Complementary/Alternative Medicine</strong></td>
<td>(1) Discuss how to integrate complementary and/or alternative medicine treatments for symptoms of neuromuscular diseases. (2) Distinguish which treatments have been scientifically studied and which have benefits which are anecdotally noted. Loretta M. VanEvery, MD</td>
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<td>8:00 am -</td>
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<td><strong>US Controversial Topics</strong></td>
<td>(1) Discuss the utility of diagnostic US in CTS. (2) Discuss the utility of diagnostic US in the diagnosis of amyotrophic lateral sclerosis. (3) Identify a scientific and rational approach when using diagnostic US in the EDX lab. Michael S. Cartwright, MD</td>
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NM Pathology as a Diagnostic Tool in Challenging NM Cases: Taking it to the Next Level

(1) Integrate the findings from nerve and muscle biopsies with clinical evaluation for diagnosis complex NM cases. (2) Identify the usefulness of nerve and muscle biopsies in era of genetics testing. (3) Formulate the treatment of unusual NM disorders based on nerve and muscle biopsy results.

Justin Y. Kwan, MD | Suur Biliciler, MD | Cecile L. Phan, MD

8:00 am - 9:30 am
Session
1.5 CME/CEU

8:00 am - 9:30 am
NM Video Cases
(1) Discuss significant physical signs of different NM disorders from video presentations. (2) Describe how to guide your laboratory investigations based on accurate identification of leading findings on video cases. (3) Analyze how to use EDX tests as an extension of clinical examination. (4) Assess how longitudinally follows the progress of NM diseases via temporally spaced video clips. (5) Differentiate between functional and organic NM disorders via video case demonstration.

Aziz Shaibani, MD

9:00 am - 4:00 pm
Exhibit Hall
Want to learn more about the products that make our industry unique? Take the opportunity to stop by and see the latest innovations in our industry.

10:00 am - 12:00 pm
Plenary 2: Precision Medicine in NM and MSK Medicine
RNA-targeted Mechanisms and Therapeutics for ALS - Olney Lecture
Timothy M. Miller, MD, PhD

ALS and Related NM Diseases in the Precision Medicine Era - Lambert Lecture
Matthew B. Harms, MD

2:00 am - 1:00 pm
Session
2.0 CME/CEU

1:30 pm - 3:00 pm
Developing Education
(1) Discuss EMG report writing. (2) Discuss GME for the EMG clinician-educator

Taylor B. Harrison, MD | Kerry H. Levin, MD | Dianna Quan, MD | Wendy M. Helkowski, MD

1:30 pm - 3:00 pm
How to Build a Private Practice
(1) Identify opportunities for practice building in your academic and/or private practice medical community. (2) Implement strategies to align your EDX practice with the needs of patients and referring providers. (3) Identify the educational needs of referring providers and leverage this to improve patient care and build a successful EDX practice.

Shawn Jorgensen, MD | John W. Norbury, MD

1:30 pm - 5:30 pm
Bedside Evidence Based Medicine
Identify study design characteristics and learn basic biostatistics skills to evaluate a study critically: “How valid are the results and how applicable are they to my patient?”

Limited to 50 - registration is required

Pushpa Narayanaswami, MBBS, DM | Gary S. Gronseth, MD | Raghav Govindarajan, MD

1:30 pm - 5:30 pm
Interactive Case Based Approach to Genetics and Neuropathology
(1) Recognize the importance of correlating clinical, electrophysiological and pathological findings in the diagnosis of NM diseases. (2) Illustrate the usefulness of NM pathology findings in patient care. (3) Analyze available treatments in hereditary NM diseases.

Margherita Milone, MD, PhD | Justin Y. Kwan, MD | Teezin Liewluck, MD | Mohamed Kazamel, MD | Suur Biliciler, MD | Christopher J. Klein, MD

11:30 am - 12:30 pm
Abstract Poster Presentation I
Authors for posters 1 - 105 will be available to discuss their research. Review the information from this year’s abstracts and meet the authors.
### Demyelinating Neuropathies

1. Describe criteria used for identifying demyelination on NCS.
2. Identify technical pitfalls in identifying demyelination.
3. Describe the presentation, diagnosis, and treatment of GBS and CIDP.
4. Recognize select paraproteins associated with demyelinating neuropathies.
5. Identify inherited forms of demyelinating neuropathy.

Shawn J. Bird, MD | Mark B. Bromberg, MD, PhD | Nicholas E. Johnson, MD | Christyn Edmundson, MD | Noah Allan Kolb, MD | Candise Dolan, CNCT, R.EEG.T, R.NCS.T

### Use of Electrodiagnosis and US for Evaluation of Focal Neuropathies of the Upper Limb

1. Review the capabilities of high frequency US to image the peripheral nervous system.
2. Review the important components of the EDX evaluation for assessment of focal neuropathies.
3. Review potential contributions of US and EDX for assessment of focal neuropathies including the relative strengths and weaknesses of each.
4. Discuss case examples of challenging focal neuropathies with improved management decisions provided by the information gained from the use of both US and EDX techniques.

Jeffrey A. Strakowski, MD | Michael S. Cartwright, MD | Jun Kimura, MD

### Brain Computer Interface/Functional Recovery

Participants will (1) identity and discuss brain-computer interfaces; and (2) explain and summarize ongoing trials of intracortically-based brain-computer interfaces for people with paralysis.

Leigh Robert Hochberg, MD, PhD | Karunesh Ganguly, MD, PhD

### Genomic Testing of the NM Patient: Ethical & Clinical Considerations

1. Determine indications for genetic testing in the NM patient.
2. Implement patient and family counseling that encompasses both the pre and post testing period and beyond.
3. Identify potential collaborations with clinical and research entities to support coordinate care and discovery.

Mario Saporta, MD, PhD | Ericka P. Simpson, MD | Matthew B. Harms, MD

### Exercise for NM Disease

1. Explain benefits of exercise in NM and autonomic disorders.
2. Identify types of exercise used to benefit NM/autonomic disorders and how to prescribe.

Amanda C. Peltier, MD, MS | Mamatha Pasnoor, MD | J. Robinson Singleton, MD

### Member Practice Issues Open Forum

The Professional Practice Committee (PPC) will be hosting an open forum for members to discuss any current issues or trends they are seeing in their practices and that the PPC may be able address either with advice, or potentially, through the creation of a new position statement.

Millie Suk, JD, MPP | Professional Practice Committee members

### Abstract Awards Reception

Enjoy an evening celebrating research! Socialize with abstract authors while enjoying snacks, wine, and refreshments. Poster authors will be available to discuss their research.

EMG Tonight

EMG Tonight is an interactive, entertaining session formatted like the old Tonight Show with Johnny Carson. This session is meant to be a lighthearted look at EMG with lots of laughs. A variety of “guests” will appear through the duration of the “show” to share their wisdom on various EMG topics.

Erik R. Ensrud, MD | Ileana Howard, MD | Jun Kimura, MD | John W. Norbury, MD | Lawrence R. Robinson, MD | Millie Suk, JD, MPP | Amanda C. Peltier, MD, MS

### Entrapment Neuropathies

1. Demonstrate how to use the Robinson Index for diagnosis of CTS.
2. Identify the best approaches for diagnosing ulnar neuropathy at the elbow.
3. Discuss how to formulate prognostic statements in focal neuropathies.

Lawrence R. Robinson, MD
**EDX Evaluation of the Foot**

(1) Describe which tests (NCS & EMG) constitute the optimal EDX evaluation of the foot. (2) Assess the role of needle EMG in EDX of the foot. (3) Assess the differential diagnosis for neuropathic foot pain, including entrapment neuropathies in the foot/ankle. (4) Compare the electrophysiologic findings and clinical presentation in TTS vs peripheral neuropathy.

David R. Del Toro, MD

**Peripheral Neuropathy**

(1) Discuss a differential diagnosis of peripheral neuropathy and further divide the neuropathies into motor, sensory, and mixed types as well as into demyelinating and axon loss types. (2) Discuss the EDX approach to evaluating patients with diffuse polyneuropathies. (3) Describe treatment options for neuropathies from immunosuppression to neuropathic pain management.

Peter D. Donofrio, MD

**Role of Placebo in Clinical Trials and NM Therapies**

(1) Explain the factors that lead to the placebo response in the placebo arm of the clinical trials. (2) Convey the neurobiology of the placebo effect in clinical trials. (3) Evaluate the impact of placebo on pain and fatigue and project that on other NM disorders. (4) Identify methods to minimize impact of placebo on outcome in clinical trials. (5) Summarize the positive impact of placebo in treatment of NM diseases.

Aziz Shaibani, MD

**Setting up your NM US Lab**

(1) Describe the US equipment needed to perform NM US. (2) Address barriers to implementation of US into an EMG laboratory. (3) Discuss appropriate coding for NM US. (4) Provide guidance on obtaining appropriate training for performing NM US.

Lisa D. Hobson-Webb, MD

**Brachial Plexopathies**

(1) Describe the anatomy of the brachial plexus. (2) Describe the role of the sensory NCS in initial localization of focal lesions within specific brachial plexus regions. (3) Analyze the role of motor NCS in further localizing and characterizing the lesion (pathophysiology, severity, prognosis). (4) Identify the role of needle EMG in confirming the NCS findings and further localizing and characterizing the lesion, especially its temporal features (slowly progressive, rapidly progressive, acute, subacute, chronic). (5) Demonstrate this approach using illustrative cases.

Mark A. Ferrante, MD

**NM Junction Techniques**

(1) Describe NM junction physiology. (2) Discuss RNS testing technique, quality control, and findings in disease. (3) Discuss jitter assessment with single-fiber and concentric needles. (4) Identify EDX assessment strategies for patients with NM transmission disorders.

Amanda Coleman Guidon, MD

**Autoimmune Demyelinating Polyneuropathies**

(1) Discuss how to use clinical and laboratory features to identify and classify autoimmune neuropathies. (2) Discuss management of this group of disorders.

Jeffrey A. Allen, MD

**Basic Nerve**

(1) Interpret what you see on the screen with nerve conductions, some pitfalls and how to correct them. (2) Classify repetitive stimulation and what you see in different NMJ disorders. (3) Summarize information and host Q & A discussion.

Teresa Spiegelberg, CNCT, R.NCS.T, R.EEG.T, BS

**Women in NM Medicine**

(1) Discuss challenges and opportunities that face women today as they manage multiple roles. (2) Relate the experiences of women leaders in medicine. (3) Explore methods of addressing gender bias in the workplace/resources to address gender bias in the workplace.

Dianna Quan, MD | Bonnie Weigert, MD | Janice M. Massey, MD
### Cranial Nerve Testing

(1) Describe the basic physiology which underlies the impulse propagation along the nerve axons and generation of muscle action potentials. (2) Outline the current approach in evaluating neuropathies affecting the accessory, trigeminal, and facial nerves. (3) Identify features of NCS abnormalities found in disorders affecting these nerves. (4) Recognize EDX techniques used for this evaluation. (5) Describe the use of blink reflex for assessing the trigeminal and facial nerves. (6) Discuss repetitive stimulation of the facial and accessory nerves for evaluation of neuromuscular junction. (7) Discuss the merit and demerit of commonly used methods and the technical pitfalls that may lead to an erroneous interpretation of the acquired results.

Jin Kimura, MD

### Hereditary Neuropathy Foundation Patient Outcomes

(1) Explain the impact of Patient Reported Outcomes (PROs) on diagnosis, functional outcome measures, and research support for accelerated CMT therapies. (2) Recognize the importance of incorporating referral resources to CMT clinicians for improving patient treatment options and Transitional Care practices.

To be announced

### Prosthetics and Orthotics

(1) Describe tips for successful prescription of commonly useful orthotics and prosthetics of the upper extremity that are helpful in NM disease. (2) Describe pitfalls in prescription of lower extremity orthotics and prosthetics and how to overcome them to maximize patient utilization. (3) Describe how to communicate with your patients about economic factors involved in prescription and utilization of orthotics and prosthetics, including how you both can advocate for the best selection for them.

Erik R. Ensrud, MD

### New NM Therapies: Integrative Medicine

(1) Evaluate the current evidence for integrative medicine approaches to neuropathy, neuropathic pain, myalgias, cramps and fatigue. (2) Use nutrition, exercise, supplementation and an “anti-inflammatory treatment approach” in the care of common neuromuscular conditions. (3) Identify and manage potential nutrient depletion from common pharmaceuticals. (4) Summarize the current evidence for acupuncture in the treatment of peripheral neuropathy. (5) Differentiate various acupuncture modalities such as manual acupuncture, electroacupuncture and moxibustion. (6) Identify which patients with peripheral neuropathy may benefit from acupuncture and educate them as to what a typical acupuncture treatment course would entail.

Alexandra K. Dimitrova, MD, MA | Julie Rowin, MD | Jinny Tavee, MD

### Exhibit Hall

Want to learn more about the products that make our industry unique? Take the opportunity to stop by and see the latest innovations in our industry.

### Plenary 3: Precision Medicine in NM and MSK Medicine

**FDA Regulation of Cell Therapy**

Wilson W. Bryan, MD

**From Assessing Evidence to Determining a “Fair” Price: How Should the Value of New Treatments for NM Disorders be Evaluated?** - *Reiner Lecture*

Steven D. Pearson MD, MSc, FRCP

### Abstract Poster Presentation II

Authors for posters 106 - 210 will be available to discuss their research. Review the information from this year's abstracts and meet the authors.
### Challenging Cases Roundtable

Meeting attendees are invited to participate in a new and exciting Roundtable of EDX NM Challenging Cases. Attendees will confer with experts who will recommend a wide array of principles, including performance and interpretation of their clinical studies and add clinical input in a smaller one-on-one setting. This session will provide positive feedback to stimulate use of quality EDX studies in the diagnosis and treatment of patients. Participants are encouraged to bring their own cases to the session.

*Limited to 60 - registration is required*

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<tr>
<th>1:30 pm - 3:00 pm</th>
<th>Bashar Katirji, MD</th>
<th>Erik R. Ensrud, MD</th>
<th>Mark A. Ferrante, MD</th>
<th>Bryan E. Tsao, MD</th>
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### Respiratory Evaluation & Management

(1) Assess and evaluate the respiratory status, including airway clearance, of the adult NM patient. (2) Identify and manage sleep related breathing disorders of adult NM patients. (3) Utilize devices to evaluate pulmonary function and devices to manage airway clearance and ventilation.

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<th>1:30 pm - 3:00 pm</th>
<th>Ericka P. Simpson, MD</th>
<th>Venessa Holland, MD</th>
<th>Aparajitha K. Verma, MD</th>
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### SMA Therapy in the Age of Nusinersen: Experience at Three Academic Medical Centers

Explain the major logistical challenges posed by this therapy, including institutional hurdles to start-up, the prior authorization process, scheduling patients, and administering the drug.

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<tr>
<th>1:30 pm - 3:00 pm</th>
<th>Edward C. Smith, MD</th>
<th>Thomas O. Crawford, MD</th>
<th>Perry Shieh, MD</th>
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### Neuroprosthetics

(1) Explain the underlying physiology and recording techniques utilized in the electromyographic control of prosthetic limbs. (2) Recognize opportunities for engineering solutions to solve challenges faced by amputees, including intent recognition, haptic feedback, and degrees of freedom.

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<tr>
<th>1:30 pm - 3:00 pm</th>
<th>William Filer, MD</th>
<th>Paul F. Pasquina, MD</th>
<th>Dustin Tyler, PhD</th>
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### Emerging Therapies and Controversies

(1) Identify current, recently approved and in the pipeline ALS therapies. (2) Discuss newly emerging novel therapy in SMA. (3) Assess additional treatment options and thymectomy outcomes in MG. (4) Discuss various current and emerging therapies in immune-mediate neuropathy. (5) Implement current and newly emerging NM patients chronic management.

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<tr>
<th>1:30 pm - 5:30 pm</th>
<th>Todd D. Levine, MD</th>
<th>Bassam A. Bassam, MD</th>
<th>Mohamed Kazamel, MD</th>
<th>Said R. Beydoun, MD</th>
<th>Amanda Leigh Witt, MD</th>
<th>Perry B. Shieh, MD, PhD</th>
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### Diagnosis and Treatment Breakthroughs in Genetic Testing

(1) Discuss how to integrate current testing platforms in your neuropathy practice. (2) Discuss the technical strengths and limitations of the next generation sequencing testing for various forms of neuropathy. (3) Explain about new treatment and research approaches afforded by genetic testing. (4) Illustrate the importance of correlating molecular findings with clinical and other laboratory data. (5) Convey the relevance of a genetic diagnosis for proper treatment. (6) Summarize hereditary myopathies and neurogenic processes sharing the same defective gene. (7) Assess the genetic technical analysis strategies, and genetic counseling. (8) Generate comprehensive and helpful genetic testing reports by applying evidence-based gene variant classification guidelines. (9) Summarize latest advances in population genomic-driven drug discovery.

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<th>1:30 pm - 5:30 pm</th>
<th>Christopher J. Klein, MD</th>
<th>Margherita Milone, MD, PhD</th>
<th>Zhiyv (Neal) Niu, PhD</th>
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### US Assessment of MSK Mimics

(1) Discuss some common MSK conditions that could clinically mimic focal neuropathies. (2) Describe methods of distinguishing peripheral nerve and MSK pathology. (3) Identify cases of clinical presentations using US and EDX to distinguish potential MSK abnormalities from focal neuropathies.

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<tr>
<th>1:30 pm - 5:30 pm</th>
<th>Jeffrey A. Strakowski, MD</th>
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### Entrapment Neuropathies

1. Discuss the clinical and EDX approach to uncommon upper extremity entrapment neuropathies including ulnar neuropathy at the wrist, dorsal ulnar cutaneous neuropathy, proximal median neuropathy, suprascapular neuropathy and axillary neuropathy.
2. Discuss the clinical and EDX approach to uncommon lower extremity entrapment neuropathies including sciatic neuropathy, femoral neuropathy, obturator neuropathy, pudendal neuropathy and lateral femoral cutaneous neuropathy.
3. Identify the key distinguishing EDX features to differentiate uncommon entrapment neuropathies from their common mimickers.
4. Review anatomy and physiology of the radial motor and sensory nerves.

Samuel M. Bierner, MD | Thiru M. Annaswamy, MD, MA | Jerry Morris, CNCT, MS, R.NCS.T.

### Respiratory Evaluation & Management Part II

Demonstrations and hands-on learning stations.

Ericka P. Simpson, MD | Venessa Holland, MD | Aparajitha K. Verma, MD

### Axial Weakness

1. Discuss the clinical approach to patients with axial postural disorders, and the differentiation of NM causes from dystonia or skeletal problems.
2. Diagnose the various NM causes of axial weakness, including muscle, NM junction, peripheral nerve and motor neuron etiologies.
3. Discuss the association of camptocormia with NM disease.
4. Recognize factors that may predict response to immunomodulating therapy in axial weakness.

Perry K. Richardson, MD | Elie Naddaf, MD | Mohammad Abu Rub

### Channelopathies in NM Diseases

1. Explain the primary periodic paralyses.
2. Discuss the management and treatment of periodic paralysis.
3. Summarize conditions associated with sodium channelopathies.

Jau-Shin Lou, MD, PhD, MBA | Mohammad Kian Salajegheh, MD
### Intraoperative Monitoring

1. Employ optimization techniques to improve the quality of baseline intraoperative somatosensory evoked potentials and motor evoked potentials.
2. Recognize technical issues with intraoperative evoked potentials and implement effective troubleshooting strategies to resolve.
3. Interpret evoked potential changes to localize the site of neurologic injury and provide a differential diagnosis.

E. Matthew Hoffman, DO, PhD

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### Advocacy

1. Discuss what's going on in Washington, DC and how it affects AANEM members.
2. Identify how to successfully advocate for your interests.
3. Discuss AANEM's advocacy efforts and how you can assist.

Millie Suk, JD, MPP

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### Traumatic Brachial Plexopathy

1. Describe the anatomy of the brachial plexus and clinical presentations of traumatic brachial plexopathies.
2. Discuss the use of EDX studies in localization, quantification of the degree of injury and prognosis.
3. Distinguish the imaging studies including MRI neurography, CT myelogram, US and its limitations.
4. Discuss the Seddon and Sunderland grading systems and how MRI neurography can help predict pre-operative injury grade.
5. Describe intraoperative modalities (CMAP, NAP) employed for brachial plexus surgeries and how IOM helps guide the surgical options.
6. Identify the cutting edge surgical options, including neurolysis, nerve grafting and transfer.

Vita G. Kesner, MD, PhD | Nicholas M. Boulis, MD | Adam Singer, MD

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### Small Fiber Neuropathy/Autonomics

1. Describe the presenting symptoms and review the evaluation and management of orthostatic hypotension.
2. Identify a step wise approach for the diagnosis of amyloidosis and discuss current treatments and drugs in pipeline for ATTR.
3. To evaluate the etiology and impact of ED and present a practical clinical approach to diagnosing and investigating common and treatable causes in men with ED.

Divisha Raheja, MD | Jasvinder PS Chawla, MBBS, MD, MBA | Steven Vernino, MD, PhD | Kourosh Rezania, MD

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### W05AS Cranial NCS and EMG Testing

Perform neurophysiological testing of the cranial nerves including (1) blink reflexes and jaw jerk; (2) seventh NCSs; (3) eleventh nerve testing and (4) discuss EMG of key muscles that complement the cranial NCS.

Jun Kimura, MD

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### W07AS Measuring Jitter With Concentric Electrodes

1. Demonstrate how jitter can be measured using concentric electrodes.
2. Identify machine settings and limitations. Must be familiar with the basic concepts of SFEMG techniques.

Donald B. Sanders, MD

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### W18AS NM US

1. Obtain images with transverse and longitudinal transducer positions.
2. Describe how to manipulate basic US instrumentation to include focal depth, Doppler flow, and transducer frequency.
3. Describe how muscle, nerve, and tendon appear with US.
4. Discuss the principle of anisotropy.

Vanessa Baute, MD

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### W21AS NCS Pitfalls

1. Identify common instrumentation, physiologic, and operator errors.
2. Alter recording electrode montages and use the instrument’s filters to help optimize the recording of motor and sensory potentials.

Bassam A. Bassam, MD

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### W39AS Physical Exam of the Athlete: Lumbar Spine and Lower Extremity

1. Distinguish different pain generators in the lumbar spine and how specific sports cause overuse injuries.
2. Describe a specific diagnostic workups and treatment plans for a specific sports related spine injuries.

Francis P. Lagattuta, MD
### W45AS Cervical Radiculopathy/Brachial Plexopathy

(1) Discuss the anatomy of the cervical roots and the brachial plexus. (2) Describe the role of the sensory NCS in the initial localization of axon loss processes to preganglionic versus ganglionic/postganglionic. (3) Illustrate the role of the sensory NCS in localizing focal lesions to specific regions of the brachial plexus (root, trunk, division, cord, terminal nerve). (4) Discuss the role of motor NCS in further localizing the lesion and in defining its severity. (5) Describe the role of the needle EMG in confirming the NCS findings and in defining the temporal features of the disorder (slowly progressive, rapidly progressive, acute, subacute, chronic). (6) Demonstrate this information using illustrative cases.

Mark A. Ferrante, MD

### W58AS US Upper Extremity Nerves and Plexus

(1) Explain the optimal transducer frequency for imaging upper extremity nerves. (2) Identify the median nerve at the wrist, ulnar nerve at the elbow, and brachial plexus using US. (3) Describe normal median nerve mobility and the appearance of ulnar nerve dislocation on real-time US. (4) List the findings of nerve entrapment as may be seen on US and findings in structures other than nerve that may be relevant.

Monika Krzesniak-Swinarska, MD

### W61AS US Lower Extremity Nerves and Muscles

(1) Explain optimal transducer frequencies for imaging lower extremity nerves. (2) Identify the tibial nerve at the ankle and knee, the fibular nerve at the knee, and the sciatic and sural nerves using US. (3) Describe the branching patterns of tibial, fibular, and sural nerves in the lower extremities. (4) List expected findings of nerve entrapment as may be seen on US and findings in structures other than the nerve that may be significant.

Steven James Shook, MD

### W77AS US-Guided Peripheral Nerve Interventions-Hydrodissection

(1) Discuss important principles of peripheral nerve identification. (2) Identify the anatomy and sonographic appearance for some common peripheral nerve procedure locations. (3) Describe the methods and techniques for performing peripheral nerve needle-guided procedures. (4) Discuss the methods and techniques for performing hydrodissection procedures for entrapment neuropathies.

Jeffrey A. Strakowski, MD

### W78AS Chemodenervation for Head and Neck Conditions: Dystonia, Sialorrhea, Migraine

(1) Recognize the various conditions of the head and neck that can be treated with botulinum neurotoxins (BoNT). (2) Identify the commonly involved muscles in cervical dystonia. (3) Localize the BoNT injection sites for the various conditions involving the face (dystonias, sialorrhea, migraine headaches). (4) Discuss how to use needle EMG and US to help guide BoNT injections for head and neck conditions.

Atul T. Patel, MD

### W79AS Optimizing the Evaluation/Management of Peripheral Nerve Trauma: Multidisciplinary Approach

(1) Identify the indications for and the importance of early multidisciplinary evaluation of peripheral nerve trauma. (2) Describe potential limitations and pitfalls in the EDX assessment of these patients. (3) Describe the indications and advantages of utilizing US in conjunction with EDX evaluation. (4) Identify the typical surgical approaches utilized in peripheral nerve trauma. Faculty will discuss and share complex cases with the group.

Jonathan Knuth Smith, MD | David Reece, DO | Matthew E. Miller, MD

### Plenary 4: Precision Medicine in NM and MSK Medicine

Precision Medicine Therapeutics in Duchenne Muscular Dystrophy; Dystrophin Restoration and Exercise Mimetics

Craig M. McDonald, MD
**Initialisms**

**AANEM**: American Association of Neuromuscular & Electrodiagnostic Medicine  
**ABMS**: American Board of Medical Specialties  
**ABPN**: American Board of Psychiatry & Neurology  
**ABPMR**: American Board of Physical Medicine and Rehabilitation  
**ALS**: Amyotrophic lateral sclerosis  
**ATE**: Ask the experts  
**ATTR**: Amyloid transthyretin  
**CIDP**: Chronic inflammatory demyelinating polyradiculoneuropathy  
**CK**: Creatine kinase  
**CMAP**: Compound muscle action potential  
**CNP**: Clinical neurophysiology  
**CTS**: Carpal tunnel syndrome  
**ED**: Erectile dysfunction  
**EDX**: Electrodiagnostic  
**EMG**: Electromyography  
**GAA**: Acid alpha-glucosidase  
**GBS**: Guillain-Barré syndrome  
**HRDB**: Heart rate variation during deep breathing  
**HIV**: Human immunodeficiency virus  
**IOM**: Intraoperative monitoring  
**LGMD**: Limb-girdle muscular dystrophy  
**MEP**: Motor evoked potential  
**MG**: Myasthenia gravis  
**MGFA**: Myasthenia Gravis Foundation of America  
**MND**: Motor neuron disorder  
**MRI**: Magnetic resonance imaging  
**NM**: Neuromuscular  
**NMDs**: Neuromuscular disorders  
**NMJ**: Neuromuscular junction  
**PMR**: Physical medicine and rehabilitation  
**Q-SART**: Quantitative sudomotor axon reflex test  
**QST**: Quantitative sensory test  
**RNS**: Repetitive nerve stimulation  
**SEP**: Somatosensory evoked potential  
**SFEMG**: Single-fiber electromyography  
**SIG**: Special interest group  
**SSR**: Sympathetic skin response  
**TOS**: Thoracic outlet syndrome  
**TST**: Thermoregulatory sweat test  
**TTS**: Tarsal tunnel syndrome  
**US**: Ultrasound  

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**AANEM Annual Business Meeting**

The AANEM Business Meeting will be held at the beginning of Plenary 1.

At this meeting, members will have the opportunity to vote and hear about recent activities of importance to membership including a report on AANEM’s finances. Nominations for the Board will be presented. AANEM fellow and active members are especially encouraged to attend.
Meeting Objectives
The 2018 annual meeting will focus on improving patient care, medical knowledge, interpersonal communication, professionalism, and systems-based practices in the following areas: neuropathies, updates in NM disorders including SMA, emerging gene therapies for NM disease, hyperexcitable membranes, iatrogenic and autoimmune disorders, EDX for focal neuropathies, genetics, treatment of neuropathic pain with evidence-based medical care options, stem cell therapy, US and MSK disorders.

After attending this activity, attendees will:
• Enhance their ability to obtain a comprehensive patient history and examination; improve their ability to develop a differential diagnosis and direct appropriate diagnostic work-ups; and assess rehabilitation potential for patients with NM and MSK diseases. (Patient care)
• Develop technical skills necessary to perform neurologic, EDX, and rehabilitative procedures; identify and describe important EDX, biopsy, genetic, radiological, and US findings; develop awareness about the side effects of drug therapies and their management; and understand updated information on the genetic basis of NM disorders and their treatment. (Medical knowledge, Practice-based learning)
• Improve ability to communicate with and educate patients, families, and members of the healthcare team; develop awareness of ethical and biomedical legal issues related to patient care; enhance awareness of patient confidentiality issues as they relate to patient care; demonstrate professionalism in clinical, research, and academic practice; and demonstrate skills in end-of-life care and withdrawal of support. (Interpersonal communication skills, Professionalism)
• Develop awareness of cost effectiveness of diagnostic studies and treatments and resource limitations in health care; identify and access supportive healthcare services and mechanisms that improve patient care and patient quality of life. (Systems-based practice)

Accreditation Statement
The AANEM is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA Credit Designation Statement
The AANEM designates this live activity for a maximum of 22 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Royal College of Physicians & Surgeons of Canada
Activities held outside of Canada developed by a university, academy, specialty society or other physician organization can be recorded as accredited group learning activities under Section 1 of the Royal College of Physicians and Surgeons of Canada’s Maintenance of Certification (MOC) Program. The AANEM is a physician organization accredited by the ACCME.

Self-Assessment Credit
Five courses at the 2018 annual meeting will be designated to offer Part II MOC Self-Assessment credit for physicians. AANEM will report completion of this self-assessment activity to ABPN and ABPMR.

Disclaimer Statement
AANEM will disclose to learners the relevant financial relationships for those in control of CME content prior to the educational activity or disclose that there were no relevant financial relationships. Information will be provided through print and verbal disclosures.

AANEM Annual Meeting Refund Policy
The association dedicates a significant amount of time and expense to deliver a great annual meeting each year. While we hope everyone who registers for the annual meeting will be able to attend, we understand that circumstances may sometimes prevent this from happening. AANEM has established the following refund policy for those who request a refund.

Refund requests received prior to 60 days from the start of onsite registration will be refunded at 100%.

Refund requests received 60 days to 14 days from the start of onsite registration will be subject to a $100 cancellation fee and any remaining amount will be refunded.

Refund requests received from 13 days, through the start of onsite registration, will be subject to a $150 cancellation fee and any remaining amount will be credited toward future AANEM purchases (credit expires 2 years after the first day of the annual meeting). Registration fees will not be refunded after the start of onsite registration*.

*Individual workshops, events, or sessions that were purchased in addition to the standard registration fee may be cancelled during the meeting, as long as the attendee has not cancelled their standard meeting registration. A refund of 50% of the purchase price will be provided. The ticket must be returned to the registration desk to receive a refund.
Twenty years ago, Eric J. Sorenson, MD, joined the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM). His membership has had a significant impact on him both personally and professionally.

“Very early in my career, one of my mentors encouraged me to join AANEM. He emphasized how it would make me a better electromyographer and offer me the opportunity to share my research while encouraging collaboration with others. AANEM’s exceptional networking opportunities have given me the ability to engage with my peers from other medical centers and practices and expanded my perspectives on electrodiagnostic and neuromuscular issues.”

Join AANEM Today!

**Partner** with the premier association in neuromuscular and electrodiagnostic medicine – AANEM.

**Learn** through hundreds of educational products and presentations prepared by leaders in your field.

**Collaborate** and network in a comfortable environment with PMR and neurology colleagues at all career stages.

**Receive** recognition for your research and writing endeavors.

**Support** advocacy and research on behalf of medical professionals and the patients you serve.

**Enhance** your credibility through respected certification and accreditation programs.

**Get involved** by participating in a variety of committee and volunteer opportunities.

**Save** on continuing education, maintenance of certification, the *Muscle & Nerve* journal, the AANEM Annual Meeting, exceptional products and many other benefits.