Meet Our New President

Showcase Your Research

Introducing AANEM Connect

Improving Lives with 3D Printed Prosthetics

AANEM Foundation
Research Efforts
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ANNUAL MEETING
The AANEM Annual Meeting is the premier educational event for those involved in neuromuscular (NM) and electrodiagnostic (EDX) medicine. Members enjoy a substantial registration discount. The meeting is a mix of cutting-edge sessions and hands-on workshops from leading experts in neurology, PMR, and other disciplines. Attend to build professional relationships and keep current in your practice.

EDUCATION
Keep up-to-date in your practice and meet your education and maintenance of certification requirements with exclusive AANEM products developed by our experts.

NEWS SCIENCE EDITORIAL BOARD (NSEB)
The NSEB reviews more than 30 medical journals to identify important, newsworthy items in the field and summarizes pertinent manuscripts to share with AANEM colleagues. The NSEB consists of physicians from varied backgrounds, practice settings, etc.

MUSCLE & NERVE JOURNAL HIGHLIGHTS
Muscle & Nerve is a monthly, peer-reviewed, interdisciplinary publication of original scholarly contributions centered on studies of the muscle, the NM junction, and peripheral motor, sensory, and autonomic neurons.

MEMBERSHIP
As a member of AANEM, you are an important part of a prestigious community of healthcare professionals dedicated to strengthening the field of NM medicine and providing the highest quality patient care. AANEM provides you with the tools you need to stay current in your field, such as access to relevant research and educational information and opportunities for networking and community-building across primary specialties.

FOUNDATION
The AANEM Foundation provides funds to help develop the next generation of researchers to advance the science and practice of NM and EDX medicine with the ultimate goal of improving the lives of patients with NM diseases.

ADVOCACY
AANEM’s advocacy efforts aim to improve the quality of patient care. We monitor state and federal issues, work to ensure appropriate reimbursement, create position statements to educate lawmakers and insurance companies, and fight against fraud and abuse.

PRACTICE
AANEM offers several resources to help you run your practice such as coding and billing information as well as details surrounding government healthcare programs and rules (MACRA, MIPS, etc.). AANEM also provides position statements on key topics and evidenced-based guidelines to help you deliver quality patient care.

PROFESSIONAL STANDARDS
AANEM’s Professional Standards Department helps medical professionals attain and maintain certifications demonstrating knowledge in their field and commitment to patient care. This is achieved through preparation and successful completion of the American Board of Electrodiagnostic Medicine (ABEM) exam, maintaining certifications through continuing medical education, and the Maintenance of Certification Program (MOCP). Technologists may earn certification through successful completion of the Certified Nerve Conduction Technologist (CNCT) exam; there is also a process for CNCT certification maintenance. AANEM acknowledges laboratories for achieving and maintaining established levels of quality, performance, and professionalism through the EDX Laboratory Accreditation program.
What are your goals as AANEM President?
As President, I look forward to building on the successes of the AANEM in the areas of research, quality education, and advocacy. Out of all of the initiatives driven by the AANEM, I am a firm believer in AANEM’s commitment to research in the field of NM and EDX medicine. New knowledge is the lifeblood of our work and being part of that research drive makes us a more important and vital organization.

What is your plenary topic for the 2019 AANEM Annual Meeting?
My plenary topic for 2019 will be focused on the present and future role of technology in the lives of patients with NM diseases. Technological advances are happening very quickly and are quite impressive in areas such as robotics, computerization, and mobility aids. We, as NM physicians, need to know what tools we can use to benefit our patients. I believe that by covering this important topic at our 2019 meeting, we will be able to better serve our patients because we will be able to educate them about these technologies and advocate for them to receive these technologies, if needed.

Why should people attend the 2019 AANEM Annual Meeting in Austin, Texas?
The AANEM Annual Meeting is a great learning meeting and the camaraderie is tremendous! Our annual meeting attendees come from all over, so it’s really an eclectic group with a lot of different perspectives. We have a number of excellent speakers already lined up for 2019. Areas of interest will include brain computer interface, robotics, and telemedicine. I hope all the readers of this publication are planning to join us in Austin for a really great meeting!

What benefits has AANEM membership provided you?
Because of my involvement in AANEM, I have developed several relationships with physicians around the country and have met many great friends. These personal relationships are very important to me. That being said, I enjoy all my interactions with the many physicians, researchers, and technologists at AANEM. We all bring something different to the organization, and at the end of the day, it makes the organization better. I learn and gain so much from our interactions together. Being a part of AANEM has also provided me with excellent leadership opportunities.

FAST FACTS on Dr. Chiodo
Board certified by the American Board of Electrodiagnostic Medicine and in pain medicine and spinal cord injury medicine through the American Board of Physical Medicine and Rehabilitation (ABPMR).

Currently a Professor and Associate Chair in the Department of Physical Medicine and Rehabilitation at the University of Michigan Health System in Ann Arbor, Michigan. He also serves as Medical Director of Spinal Cord Injury Medicine and Medical Director of the Spine Program.

Academic areas of interest: anatomic localization in electromyography, clinical electromyography, spinal cord injury, and spine pain.

1988
was the year he became an AANEM member.
2019 Annual Meeting to Emphasize Impact of Technology

If you haven’t already done so, be sure to mark your calendars now for the 2019 AANEM Annual Meeting taking place October 16-19. This year we’re heading south to the Lone Star State – the JW Marriott in Austin, Texas, specifically – for the premier educational event that brings together NM specialists from around the world. The focus of our 2019 meeting is “The Present and Future Role of Technology in the Lives of Patients With Neuromuscular Diseases.”

Anthony E. Chiodo, MD, MBA, and AANEM President, says choosing technology as his plenary topic made sense due to the fact that technology is so deeply embedded into our lives and will have even more of an impact on patient care in the future.

For his plenary speakers, Dr. Chiodo has selected several experts with significant experience on topics related to the impact of technology on the care of people with NM disorders. While the list of plenary speakers is still being solidified, here are the topics and speakers confirmed as of late December 2018.

**Use of Regenerative Peripheral Nerve Interfaces for Control of Neuroprosthetic Devices**

*Reiner Lecture*

Paul S. Cederna, MD, FACS

**Brain-Computer Applications for Individuals With NM Diseases**

*Dennis J. McFarland, PhD*

**The Use of Telemedicine to Enhance Care in ALS and Other NM Disorders**

*Olney Lecture*

Zachary Simmons, MD

**Future of Rehabilitation Robotics Research and Practice**

Arun Jayaraman, PT, PhD

Join us in Austin, Texas!

October 16-19, 2019

Don’t miss this opportunity to converge in the “Live Music Capital of the World” with experts in the field of NM medicine.
After his residency, Dr. Albers spent 3 years at the Medical College of Wisconsin. There he helped to develop an EMG laboratory and an EMG training program. Following that, he returned to the University of Michigan to direct an EMG laboratory jointly staffed by physiatrists and neurologists. In 1981, the NM fellowship program began at the University of Michigan – one of the earliest post-graduate fellowships of its kind – and a program that would come to define Dr. Albers.

His career as a physician began in the 1970s. Dr. Albers says he joined the AANEM in 1976, “long before it was the AANEM” (it was then known as the AAEE) and became an active member in 1978. With a career that spanned 5 decades, many of those as a professor at the University of Michigan, Dr. Albers has earned himself a prominent place in the field of academic medicine. He officially retired in June 2018.

Several current and longstanding members of AANEM were fortunate to have had Dr. Albers guide and mentor them along the way. One of those individuals is Eric J. Sorenson, MD, Professor of Neurology, Vice Chair of Neurology, and the Division Head of Neuromuscular Diseases at the Mayo Clinic in Rochester, Minnesota.

“Dr. Albers trained an extraordinary number of academic NM physician leaders. Among others, he has trained myself, Dr. Eva Feldman and Dr. Gordon Smith,” noted Dr. Sorenson. “We wanted to find a way to recognize Dr. Albers for the generational impact he has had on our field.”

To that end, Drs. Sorenson, Feldman and Smith are working together to organize a symposium at the 2019 AANEM Annual Meeting to honor the lifetime achievements of their mentor, Dr. Albers.

Dr. Feldman says her connection to Dr. Albers began in 1987 when she began her NM fellowship at the University of Michigan.

“During my first year with Dr. Albers, I had my third child, and no one could have been more supportive than Jim. This was during a period when women in academic medicine rarely had children, not to mention 3 children. He and his wife Jan were very instrumental in helping me navigate the nuances of 3 children under the age of 5 and a brand new career as an Assistant Professor in 1988, a position he helped me secure after my one-year fellowship with him,” Dr. Feldman recalled.

She says that Dr. Albers’ impact on her career has been significant.

“He has been there continuously for me. He has served as a clinical mentor with expert advice on all aspects of clinical diagnosis and care of patients. As an EMG mentor, he truly taught me everything I know about EDX medicine. And, as an academic mentor, he has guided me throughout my academic career, as I went from an assistant professor to my current position. Every step along the way, he has been present, with careful, thoughtful advice and endless support,” Dr. Feldman noted.

“As a mentor to all of us former University of Michigan fellows, Dr. Albers provided us with the guiding principles of clinical NM medicine and instilled in us professionalism and a commitment to excellence that we now share with our trainees,” stated Dr. Sorenson.

Dr. Albers says teaching others was a meaningful part of his career.

“It never seemed like a task or an assignment, as I was only busy doing my job and enjoying daily relationships with individuals who cared about their patients, were enthusiastic about their careers, and had substantial knowledge to share with me. How difficult could it be to teach in that setting?” Dr. Albers said. “I liked to preach that ‘all of us are smarter than any one of us,’ and I learned something new from the residents and fellows every day. That said, I take great satisfaction in the accomplishment of the trainees,
knowing that I was but one of many who contributed to their development.’

Dr. Albers explains that when he first learned that a symposium was going to be held in his honor at the 2019 AANEM Annual Meeting, it was a “mixture of embarrassment and humility,” but he says he is incredibly appreciative and honored.

“I think many of us throughout our careers regularly question if we are meeting the expectations of our teachers, mentors, and colleagues. I certainly am one of those individuals, and my first thought was of all of those with whom I wish I could share this honor. That said, I realized that the upcoming meeting and this symposium will be a chance to reconnect with many trainees and old friends. Looking forward to that reunion is probably the best and most important feeling I could experience,” said Dr. Albers.

In addition to his mentoring, Dr. Feldman says that Dr. Albers is also known for his scholarship, explaining that it was Dr. Albers who initially defined the EDX criteria for demyelinating neuropathy.

“His research work and contributions to the field of diabetic neuropathy are epic, and he is considered the ‘father’ of not only the clinical diagnosis of diabetic neuropathy but also the diagnostic criteria used in large clinical and epidemiological trials of diabetic neuropathy,” she explained.

The content of the Albers Symposium will be dedicated to discussing the clinical aspects of multiple neuropathies along with the influence that Dr. Albers’ work has had on the field of neuropathy. All of the planned speakers were fellows of Dr. Albers and are in the field of academic medicine.

“Jim Albers is quite frankly the most engaging, caring, and thoughtful mentor I have ever had and his contributions to the field of NM disease are unsurpassed. There is no one more deserving of this award,” said Dr. Feldman.

Lifetime Achievement Symposium
Honoring James W. Albers, MD, PhD
2019 AANEM Annual Meeting

**Session 1**
- Co-Chair: Eric Sorenson, MD - Professor of Neurology, Mayo Clinic, Rochester, Minnesota.
- Co-Chair: Kathryn A. Stolp, MD, MS

**A Lifetime of Leadership**
Anthony G. Alessi, MD - Associate Clinical Professor of Neurology and Orthopedics, University of Connecticut

**Chronic Inflammatory Demyelinating Polyneuropathy: Diagnosis Update**
Peter D. Donofrio, MD – Professor of Neurology, Vanderbilt University Medical Center

**Chronic Inflammatory Demyelinating Polyneuropathy: Treatment Update**
Mark Bromberg, MD, PhD – Professor of Neurology, University of Utah

**Paraproteinemic Neuropathies**
Zachary Simmons, MD – Professor of Neurology, Penn State University

**Session 2**
- Co-Chair: James A. Leonard, Jr., MD – Clinical Professor Emeritus, University of Michigan
- Co-Chair: Rup Tandan, MD – Professor Neurological Sciences, University of Vermont

**James Albers and the DCCT/EDIC Cohort: A Landmark Study**
Eva L. Feldman, MD, PhD – Russell N. DeJong Professor of Neurology, University of Michigan

**Diabetic Autonomic Neuropathy**
Safwan S. Jaradeh, MD – Professor of Neurology, Stanford University

**Prediabetes and Neuropathy: Where We Are Today**
J. Robinson Singleton, MD – Professor of Neurology, University of Utah

**Exercise and Diabetic Neuropathy**
A. Gordon Smith, MD – Professor of Neurology, Virginia Commonwealth University

**Diabetes: Don’t Shake Your Finger at Me**
Amanda C. Peltier, MD, MS – Associate Professor of Neurology, Vanderbilt University

**Decompressive Surgery in Diabetes**
Ryan D. Jacobson, MD – Assistant Professor of Neurological Sciences, Rush Medical College
I think anyone in the field of neuromuscular or electrodiagnostic medicine should submit their work to the AANEM Annual Meeting. There are few meetings in medicine where nearly all the experts converge in one place, but the AANEM meeting is one of them. Submitting an abstract is a great opportunity to further develop your work and career and the entire submission process was very simple and straightforward.

~ Ryan Castoro, DO, MS, and recipient of a 2018 President’s Research Initiative Award and a 2018 Residency and Fellowship Member Award

Abstract Awards

You may choose whether you would like to have your abstract considered for one of the following AANEM Foundation awards, including the brand new Medical Student Research Award being offered for the first time in 2019. Further details regarding award criteria can be found at www.aanemfoundation.org/awards.

Golseth Young Investigator Award: Given to the best research paper submitted to the AANEM Annual Meeting by a young physician. The first and presenting author on the research project must be one of the following: a medical student in an MD, DO, DVM, or foreign equivalent program; a resident; a fellow-in-training; or, a physician within 3 years following completion of residency or fellowship training.

Best Abstract Award: Given to the first and presenting author of the best research paper submitted to the AANEM Annual Meeting. All abstracts submitted will be considered for this award unless the authors indicate they do not wish to be considered.

Continued on next page
Technologist Best Abstract Award: Given to the first and presenting author of the best research paper submitted by a technologist who has conducted and shared research to advance the science of neuromuscular and musculoskeletal diseases.

President’s Research Initiative Award: Given to up to 10 of the best abstracts submitted on the topic chosen by the AANEM President each year. The 2019 President’s Research topic is “The Present and Future Role of Technology in the Lives of Patients with Neuromuscular Diseases.” Award winners must be the first and presenting author.

Residency and Fellowship Member Recognition Award: Given to AANEM Residency and Fellowship members who are first and presenting authors on abstracts presented at the annual meeting.

*New in 2019!* - Medical Student Research Award: Given to up to 10 medical student members who are the first author and designated presenter on abstracts presented at the AANEM Annual Meeting.

Full abstract submission guidelines are available on the AANEM website at www.aanem.org/AbstractInfo.

Travel scholarships for the 2019 AANEM Annual Meeting are available for physicians practicing in economically developing countries. The deadline to apply for these scholarships is March 15, 2019. For more information, visit www.aanemfoundation.org/TravelScholarships.

If you have any questions, please call AANEM at 507.288.0100.

Abstracts must be submitted by March 15, 2019.
Training Program Directors: Test Resident and Fellow Knowledge with AANEM’s 2019 Self-Assessment Examinations

Each year, nearly 200 institutions use AANEM’s NM and/or EDX self-assessment exams (SAEs) as unique learning tools to test their physicians-in-training and compare their knowledge with others around the country. Upon completion of the exams, each institution will receive SAE coaching reports and detailed feedback to see areas where their residents and fellows excel and where they can improve.

AANEM's 2019 SAEs will be proctored May 6-15, 2019 and all SAEs will be completed online this year. To prepare for the 2019 SAEs, institutions can begin registering candidates and reserving space in computer labs for the exams. Be sure to register by our early bird deadline, February 18, 2019, in order to save $50 per registrant!

To learn more and to register your candidates, visit www.aanem.org/ProctoredSAEs.

Interactive Program Tests EMG Waveform Recognition

Looking for a tool to test your ability to accurately recognize EMG waveforms and MUP parameters? The EMG Waveform Tester by Devon I. Rubin, MD, is a unique, interactive program comprised of 14 quizzes. It focuses on:

- Recognizing firing patterns and distinguishing waveforms based on those patterns
- Grading the severity of fibrillation potentials
- Assessing other spontaneous waveforms
- Testing your ability to accurately recognize individual parameters of MUPs, including rise time, firing rate, stability, phases, and duration

“This is a unique, fun and interactive testing tool that will help residents, fellows, and seasoned electromyographers hone their skills of distinguishing different types of EMG waveforms and recognizing each MUP parameter with a high degree of accuracy,” said Dr. Rubin. “Each quiz focuses on a distinct skill, such as distinguishing fibrillation potentials from endplate or voluntary MUP, determining the grade of fibrillation potentials, or defining the firing rate of a MUP with a high degree of precision. Through practice and repetition, this program can help improve the quality of interpretation and grading of needle EMG abnormalities.”

Six CME credits are also available with the EMG Waveform Tester! To find this product on www.aanem.org, visit the Education section and search for EMG Waveform Tester on the All Education Products page.
Many Ways to Access 2018 Annual Meeting Materials

If you couldn't attend the 2018 AANEM Annual Meeting, no worries! You can still experience it in a variety of ways. We are offering our 2018 meeting content in different packages, so you can pick the package best for you! These resources are a great way to ensure the meeting's helpful educational content is always available at your fingertips.

2018 Annual Meeting Presentation Series

Neuromuscular Edition
Enhance your knowledge of NM medicine through this series of sessions from the 2018 annual meeting:
- Emerging Therapies and Controversies
- Hot Topics in NM Literature
- Interactive Case Based Approach to Genetics and Neuropathology
- SMA Therapy in the Age of Nusinersen: Experience at Three Academic Medical Centers
- History of EDX and NM Diseases
- Channelopathies in NM Diseases

13.5 CME credits | Pricing: $120/members; $209/non-members

Electrodiagnostic Edition
Earn CME through a focus on EDX sessions from the 2018 annual meeting:
- Demyelinating Neuropathies
- Entrapment Neuropathies
- Use of EDX and US for Evaluation of Focal Neuropathies of the Upper Limb
- Intraoperative Monitoring
- Torsional and Altered NM Anatomy in EDX
- History of EDX and NM Diseases

13.5 CME credits | Pricing: $120/members; $209/non-members

Ultrasound Edition
Looking for CME with an emphasis on ultrasound? Check out this series with the following sessions from the 2018 meeting:
- US Assessment of MSK Mimics
- Use of EDX and US for Evaluation of Focal Neuropathies of the Upper Limb
- US Controversial Topics
- Cutting Edge US

9 CME credits | Pricing: $80/members; $110/non-members

Self-Assessment Edition
Need Self-Assessment CME for ABPN or ABPMR maintenance of certification? Then, the Self-Assessment Edition of the 2018 Annual Meeting Presentation Series is perfect for you! It includes the following sessions from the 2018 annual meeting:
- Interactive Case Based Approach to Genetics and Neuropathology
- Basics With the Experts
- Demyelinating Neuropathies
- Emerging Therapies and Controversies
- Entrapment Neuropathies

45 Self-Assessment CME | Pricing: FREE to members; $297/non-members

This is a valuable resource for members and the best part is … it's FREE! Join AANEM to receive this outstanding benefit and access to other exclusive AANEM resources at www.aanem.org/join.

2018 Annual Meeting Collection

The 2018 AANEM Annual Meeting Collection is a digital download of session presentations from the meeting. The majority of 2018 meeting sessions are included in the collection with the exception of “Ask the Expert” sessions.

The collection also does not include workshop materials (see 2018 Workshop E-Bundle details below).

77.5 CME credits | Pricing: $450/members; $780/non-members

2018 Workshop E-Bundle

A variety of workshops were offered at the 2018 AANEM Annual Meeting, including 9 brand new ones! If you were unable to attend any or all of the 2018 workshops, consider purchasing the 2018 Workshop E-Bundle.

This bundle gives you access to all of the workshop handouts (42 total) shared at the meeting. These handouts contain the teaching points of the workshops. Purchasers receive the handouts via a single downloadable PDF.

CME/CEUs cannot be obtained by purchasing the 2018 Workshop E-Bundle. | Pricing: $100/members; $250/non-members

For more details about the 2018 AANEM Annual Meeting product offerings, visit the AANEM website at www.aanem.org/Education. Select All Education Products and search for “2018.”

Submitted by: Elliot Bodofsky, MD  
Edited by: Rocio Carolina Garcia Santibanez, MD

Ulnar mono-neuropathy is non-localizable (NL-UN) when there is clinical ulnar neuropathy, reduced ulnar distal sensory and/or motor amplitude, but no focal slowing or focal loss of amplitude. This study investigated the frequency and severity (clinical and electrophysiologic) of NL-UN, and whether ultrasound of the nerve could assist in the diagnosis of NL-UN. One hundred thirteen patients referred for EDX testing with signs and symptoms of ulnar neuropathy had EDX testing. Sixty-four patients had reduced ulnar distal motor or sensory amplitude, 48 localizable (75%) and 16 (25%) non-localizable. The NL-UN patients were predominately male, had significantly more severe clinical findings and greater amplitude reduction than the localizable patients.

All NL-UN patients received ultrasound scanning of the ulnar nerve from the wrist to mid humerus. The ulnar diameter was measured at the widest area, and compared with normal values. All ultrasound studies were abnormal. Most of the patients (13/16, 81%) had evidence of focal enlargement at the elbow. The other 3 (19%) had evidence of diffuse ulnar enlargement. All 3 were diabetic, indicating probable diabetic neuropathy.

Comment: There is a fairly high incidence of NL-UN. Previous studies have shown some variation in incidence. All patients with NL-UN showed ulnar pathology on ultrasound, some quite severe, most with focal ulnar enlargement across the elbow. This strongly suggests that ultrasound evaluation should be considered in any case of non-localizable ulnar neuropathy.


Submitted by: Clark W. Pinyan, MD, MPH  
Edited by: Niranjan N. Singh, MD

In this study, the authors compared injection of 5cc D5W (dextrose group, 27 wrists) to 3ml triamcinolone in 2cc NS (steroid group, 27 wrists) under ultrasound guidance in patients with mild to moderate carpal tunnel syndrome. Both groups showed improvement in both the visual analog scale of symptoms and the Boston Carpal Tunnel Questionnaire in the first 3 months. Improvement in the steroid group reversed through the 3rd to the 6th month, with continued improvement in the dextrose group. Significant difference between the 2 groups was seen at the 4th and 6th months. Electrophysiologic measures were also compared. Ultrasonographic median nerve cross sectional area decreased in both groups over 6 months, and sensory nerve conduction velocity decreased in the dextrose group. Overall, however, there were no noteworthy differences between electrophysiological findings in the steroid and dextrose groups. The authors conclude that a single perineural D5W injection leads to significant reduction in pain and disability compared to the corticosteroid, from the 4th month post injection, and given the side effects of steroids, deem it to be a “better choice.”

Comment: This is a small but prospective double-blind randomized trial comparing the efficacy of ultrasound-guided steroid versus dextrose injection in mild to moderate carpal tunnel syndrome. Steroid injections have been used for decades in mild to moderate carpal tunnel syndrome – major drawbacks being short-term benefit and neurotoxicity. Dextrose injections are emerging as a novel therapy with longer duration of benefit in mild to moderate carpal tunnel syndrome.

Submitted by: Bryan X. DeSouza, MD
Edited by: Rocio Carolina Garcia Santibanez, MD

Wolpaw et al. report the first prospective, multi-site, clinical trial of a Brain Computer Interface (BCI) to restore communication in patients with ALS.

In this study, Wolpaw and colleagues assessed the reliability and usefulness of the Wadsworth BCI system, an EEG–scalp recorded BCI, as a practical communication device in advanced ALS patients in a home environment for up to 18 months. BCI use included audio books, conversation, copy-spelling/calibration, email, internet newreader, pictures and YouTube. Outcome measures were extent and nature of BCI use, BCI benefit versus burden, quality of life, technical support and patient attrition.

The study recruited 42 veterans with loss of verbal and/or written communication on the ALSFRS-R (ALS Functional Rating Scale-Revised), but preserved reading and understanding. Of these patients, 28 were able to participate in the study, their caregivers were trained and they had use of the BCI in their homes. 9 patients (21%) dropped out due to death or disease progression, 4 lost interest, and 1 was lost to follow-up. The remaining 14 patients used the BCI for 2-17 months mainly for communication. Technical problems were rare. Patient and caregiver ratings showed BCI benefit surpassed burden. McGill Quality of Life assessments were stable despite disease progression. At the end of the study, 7 of 8 participants chose to keep the BCI for further use indicating that patients felt it was important and useful for communication.

This clinical trial shows that the EEG-based brain computer interface (BCI) operated independently by patients with ALS is a useful and reliable tool for communication in a home setting with proper training and minimal support.

Comment: The study is important because it establishes proof of concept that a non-invasive BCI device can improve communication and potentially motor control in a practical way. As technology improves, so will the speed, efficiency, applications and number of the devices that will be available for our patients. Moving forward, it will be important for physicians involved in treating and managing NM diseases and neurorehabilitation to understand the uses and limitations of this technology.


Submitted by: Lisa M. Williams, MD
Edited by: Bryan DeSouza, MD

Pregnancy is a known risk factor for gestational carpal tunnel syndrome (GCTS), however the incidence is not known. Currently there is no known specific demographic or comorbid conditions associated with the incidence of GCTS.

A study of 420 pregnant patients was conducted in which they completed the Levine-Katz Questionnaire (LKQ) in their third trimester of pregnancy. Symptomatic woman in their third trimester were followed up with at 2-6 weeks, 3 months, 6 months and 12 months postpartum. Follow-ups continued in symptomatic women until symptoms resolved or women underwent surgical treatment.

The findings were that 102 women (27.7%) were symptomatic and diagnosed with GCTS during their third trimester. Postpartum follow-up was completed with 65% of the women. 4.6% had escalation of symptoms at one year. Women with and without GCTS were of similar age ranges (32.2-32.9), had higher rates of smoking (28.9% versus 13.3%), higher pre-gravid BMI (28.2 versus 26.1), higher rates of preeclampsia (9.3 versus 2.3%) and similar rates of cardiac disease and diabetes.

Comment: There is a high incidence of GCTS in the third trimester in previously asymptomatic patients and symptoms may persist beyond pregnancy. There are demographic and comorbid conditions associated with the incidence and perseverance of GCTS.
Two goals of the *Muscle & Nerve* editorial board include publishing 1-2 invited review articles each month as well as editorials to accompany articles that may have the broadest appeal and/or address particularly important clinical or scientific points. Below is a listing of the invited reviews and editorials from the December 2018 and January 2019 issues … be sure to check them out!

### Invited Reviews

**DECEMBER 2018**

2-part review on post-polio syndrome and the late effects of polio:


**JANUARY 2019**

2-part review on inflammation, immunity, and amyotrophic lateral sclerosis:

- Inflammation, immunity, and amyotrophic lateral sclerosis: I. Etiology and pathology by Miles S. Lyon, MS, Marlena Wosiski-Kuhn, BA, Rachel Gillespie, MS, James Caress, MD, and Carol Milligan, PhD.
- Inflammation, immunity, and amyotrophic lateral sclerosis: II. Immune-modulating therapies by Marlena Wosiski-Kuhn, BA, Miles S. Lyon, MS, James Caress, MD, and Carol Milligan, PhD.

### Editorials Accompanying Manuscripts

Articles of particular importance are often accompanied by editorials written by experts in the field. *Muscle & Nerve* featured 4 editorials in December and 3 in January on topics that should appeal to the broad readership audience.

**DECEMBER 2018**

- Early immunotherapy in MG
- Noninvasive ventilation in ALS
- Neuromuscular ultrasound as a biomarker in ALS
- Relationship of anxiety and fasciculations

**JANUARY 2019**

- Telemedicine in ALS
- Strength training in ALS
- The long exercise test for periodic paralysis
Revised Instructions for Muscle & Nerve Authors

Planning to submit an article to Muscle & Nerve soon? Before you do, be sure to review the February 2019 issue for revised author instructions. Here are some highlights:

Clinical Research Papers and Basic Science Papers:
• The clinical relevance for human NM disorders is the guiding principal for whether the submission is appropriate.
• Muscle & Nerve will no longer review articles on human exercise except for those directly related to specific NM diseases or animal models of these diseases.
• Muscle & Nerve will review articles about diagnostic techniques very selectively, choosing those that emphasize relevance to NM disorders.

Short Reports:
• These are now divided into Clinical Research Short Reports and Basic Science Short Reports.
• The clinical relevance for human NM disorders is the guiding principal for whether the submission is appropriate.

Noteworthy Cases (Case Reports):
• Only a small percentage of cases are accepted. The goal is to only publish novel or very rare material that will be informative to experts in the field.

Also, don’t miss the editorial by Dr. Zachary Simmons, MD, Muscle & Nerve Editor-in-Chief, on this topic titled, “Guidelines for Authors: A View from the Editor’s Desk.” In this piece, Dr. Simmons discusses the new author guidelines and shares his views on writing and submitting a research article.

I consider it a privilege to be able to edit Muscle & Nerve, a position that enables me to collaborate with the talented Associate Editors and Editorial Board members. I think nearly every day about how to maintain the Journal’s quality and to best serve the medical and scientific communities. One aspect of this is to step back at times and re-think how to provide greatest clarity to authors about what we seek.

~ Zachary Simmons, MD
Muscle & Nerve Editor

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Once you complete these steps, you’ll receive email notifications when early view articles and issues are published online.
What has been your most memorable and/or favorite experience as a member of AANEM?
This is a hard question as I have had several! One has been my involvement as a committee chair for the NM Update Committee. This role has allowed me to do all the things I love; meet new people – including the AANEM team as well as physicians who are committed to EDX and NM medicine, hear perspectives from providers at all stages of their careers and career settings, provide the opportunity to build new educational curriculum, and most of all, promote the ability to mentor and develop new members and junior clinicians.

What AANEM resources/products have you used over the years and how have they benefited you?
I have used several AANEM products. I used many previous years of the EDX SAE in preparation for my MOC examination for the ABEM boards. I also used the NM SAE during preparation for my CNP NM Subspecialty Boards. These were both great tools in helping me prepare as they were reflective of examination content but also relevant to what I see clinically as an electromyographer and NM specialist.

What advice would you give to new AANEM members?
Get involved!!! The AANEM is full of dynamic, interesting and engaged members. You will find your fit if you look!
Why did you join AANEM?
I initially joined the AANEM as part of my application for the American Board of Electrodiagnostic Medicine (ABEM) Initial Certification Exam. I wanted to be a board certified electrodiagnostician for the associated credibility. My mentors are all ABEM certified.

Why have you continued your membership with AANEM over the years?
I have found the AANEM to be a source of stimulation for personal development and have not felt the need to join any other medical societies. Early on, as a young graduate, AANEM leadership actively encouraged me to participate in committees. They have always encouraged me to speak up and welcomed me to contribute to my level of comfort. I strayed for a number of years due to life circumstances but their genuine positive encouragement to re-engage has certainly been difficult to ignore.

How has your AANEM membership impacted your career?
I have been the go-to person for issues that come up locally such as when the coding changes occurred. I have been proctoring the SAE for my residents. I have canvassed our faculty for recent AANEM initiated legislative issues.

What has been your most memorable and/or favorite experience as a member of AANEM?
As a perpetual fanboy, meeting our field’s great thinkers at the annual conference! Jun Kimura personally clarified my confusion about A-waves and Larry Robinson answered my questions about carpal tunnel studies. Oh and I also got to take a picture with Daniel Dumitru! It doesn’t get better than that!

What AANEM resources/products have you used over the years and how have they benefited you?
I’ve used the SAEs, position statements on the website, and have reached out to AANEM staff for coding, legislative, and MOC-related questions. They have all added validity to my communications with others.

What advice would you give to new AANEM members?
Jump into committees ASAP! Also, don’t be shy at the conferences. Walk up to a stranger and ask them anything. They’ll be happy to chat with a fellow EDX geek!

What is something your fellow AANEM members may not know about you?
I have a lot of hobbies. I am the lead singer in 2 cover bands (Outsourced & Twitch) in New Jersey and I have about 2 decades of experience performing in them. I also have 2 original albums to my name. I’m known for singing stuff like Led Zeppelin and Soundgarden. I’m also a huge fan of comic books. I once made a life-sized Optimus Prime costume and wore it to ComiCon. I have a dream of one day publishing a comic book teaching basic EDX principles.

Gautam Malhotra, MD
AANEM Member Since 2010
Improving Patients’ Lives with 3D Printed Prosthetics

As far back as he can remember, Cesar A. Colasante, MD, has been interested in the field of medicine. He says the combination of science, art, and helping others always appealed to him. Dr. Colasante developed a passion for PMR while working at the New York City Hospital’s burn unit located at Jacobi Medical Center.

“A large proportion of our patients that were medically stable, or even those close to reaching full healing, were unable to care for themselves due to sequelae from their injuries,” explained Dr. Colasante. “Until confronted with these scenarios, it’s hard to understand how complex our daily activities are; how eating and swallowing, brushing our teeth, speaking, ambulating, donning and doffing clothing requires so many different intact systems and/or adaptations or compensatory strategies. When patients are unable to be independent, it can be demoralizing for them. The fascinating field of PMR provides the tools to make them as independent as possible, restoring not only their function, but, many times, their hopes and enjoyment of life.”

Dr. Colasante, a PGY 3 resident, currently works in the PMR department at the State University of New York (SUNY) Upstate Medical University. In this role, he works with patients to restore and improve function through medical interventions and procedures. Besides the traditional medical management, this can include orthoses, prostheses or adaptive equipment, and compensatory strategies as well as pain relief procedures.

Through his work, Dr. Colasante has access to a 3D printer. While he has vast experience in 3D modeling, Dr. Colasante started 3D printing in just the last 3 years. In that short time, he’s made quite a difference for many of his patients.

“Among other things, I’ve printed prosthetic hands, fingers, resting splints, thumb splints, cosmetic helmets, and adaptive equipment,” he said.

Dr. Colasante’s work creating 3D printed prosthetics is making a tremendous impact on his patients, but the experiences are quite memorable for Dr. Colasante as well.

“I’ve been able to replace fingers on frostbite patients and I was able to make a bike adaptable for a little 3-year-old boy with bilateral upper limb amputation so that he could ride a bike for the first time,” he explained.

Dr. Colasante pointed out that creating the models is the most time-consuming part of 3D prostheses development.

“This is why we (Department of PMR at Upstate) try to create devices that are ‘ready-to-print,’ so the products can be used in other places where they may not have the time or necessary skills to modify the models,” he noted. “Dr. Turk (Vice-Chair) and Dr. Weber (Chair) of the PMR department at SUNY Upstate have been instrumental in streamlining this process. They have also been advocates in promoting these projects. They’ve provided further direction, mentorship and support as well as forging valuable collaboration with other institutions such as Syracuse University’s mechanical and aerospace engineering program to develop new 3D printed prosthesis and further improve on existing ones.”

Dr. Colasante says it only takes 1-24 hours to print out the parts once the models are designed.

“It’s all about taking into account each patient’s goals in life. My goal is to help my patients achieve theirs.” ~ Cesar A. Colasante, MD

Continued on next page
Prostheses that are 3D printed are considerably more cost-effective compared to traditionally manufactured devices.

“The cost of materials is quite low. For instance, a spool of polylactic acid (PLA) will cost between $30-60 and can be used to print up to 3 adult-sized body powered hands,” Dr. Colasante explained. “If you print thumb splints for hypoplastic thumbs, you could probably print several dozen. Also, the price of 3D printers has gone down making it much more affordable. There is one extra expense, the software used to create the models; but, if someone is just interested in printed a premade model, that expense is bypassed.”

Dr. Colasante notes that there are advantages and disadvantages to 3D printed prosthetics.

“3D printing allows for easier prototyping, modifications, and quick replacements, but they will not be as durable as a traditionally made device. Also, it is important to understand that a 3D printed prosthesis can (and should) incorporate other material besides the one being printed to provide a more functional product.”

There can be several delays before a patient receives a traditionally manufactured prosthetic. Insurance can delay approvals and the manufacturing process can be lengthy as well.

“All these delays impact the patient’s prosthetic training to perform activities of daily living and become independent. This is where a 3D printed prosthesis can help bridge that time gap until the final device is available. It allows the patient to start working with their prosthesis earlier, to get them used to the device and more skilled with it. This also improves long-term device acceptance and use”

Dr. Colasante says his work as a PMR physician goes beyond healing the body.

“It’s all about taking into account each patient's goals in life. My goal is to help my patients achieve theirs.”

Check out Dr. Colasante’s recently published work in the PM&R journal:
Custom Fabrication of a 3-Dimensionally Printed Helmet for Improved Socialization and Subjective Self-Assessment in a Case of Acquired Cranial Defect: A Case Presentation.

Women in Neuromuscular Medicine

AANEM featured its first ever Women in NM Medicine session at the 2018 annual meeting. This topic is a timely one given the changing demographics in neurology and physiatry as more women begin entering these fields.

“While men still predominantly fulfill neurologist and physiatrist roles, we know that for the first time, more women than men are enrolled in medical school,” explained Dianna Quan, MD, and Chair of the Women in NM Medicine session.

Although the balance in medical school enrollment is shifting, there is still room for improvement when it comes to increasing the number of female physicians in both neurology and physiatry.

“On the neurology side of things, the August 2018 issue of Annals of Neurology noted that the percentage of female neurology trainees is at about 46%, but the percentage of practicing female neurologists is only about 28%.”

Continued on next page
Furthermore, only about 31% of academic neurologists are women, and men are twice as likely to be full professors.

On the physiatry side, according to the American Board of Physical Medicine and Rehabilitation (ABPMR), females comprise 38% of the PMR physicians in training while males comprise 62%. As for PMR diplomates of the ABPMR, 36% are female and 64% are male, however, not all practicing PMR physicians are ABPMR diplomates.

“As for NM medicine, some data suggest that gender disparities are more significant compared to other neurology subspecialties when it comes to pay gaps and academic rank,” said Dr. Quan.

Attendees of the Women in NM Medicine session were able to discuss these important issues and others including language and gender issues in medicine, mentoring, parental leave, difficult interactions with colleagues, and a myriad of other concerns.

“I think it was a great session. It was very interactive. We had a wide range of people there from across the spectrum of private versus academic practice, senior versus more junior. It really helped to put a lot of issues in context,” Dr. Quan explained.

“The session highlighted some important progress that has been made for women NM practitioners over the years, but it also demonstrated that much more needs to be done to support the success of women in this field.”

The Women in NM Medicine session was not comprised of an entirely female audience. There were also male physicians in attendance who participated in the discussion.

“We did have a couple men in the room and their comments were very supportive. They voiced that the session was helpful in making them more aware of workplace bias and got them thinking about ways they can better support their women colleagues and trainees,” said Dr. Quan.

When it comes to women in AANEM membership, AANEM Executive Director, Shirlyn Adkins, JD, says that we are making progress, but the dial is moving slowly.

“Over the last few decades, AANEM membership has moved from being about 80% male/20% female to about 70% male/30% female,” noted Adkins. “Female representation within leadership, such as the AANEM Board of Directors, has also increased over the years from 10% to between 25-34%, depending on the point in time. Female representation on AANEM committees has also increased from 5% to 14%.”

“If there are female members of the AANEM that are interested in these issues, my advice to them is to recommend that this topic carry through into future meetings. I would love to see this session continue at future AANEM annual meetings and potentially grow into a forum on inclusion and diversity,” said Holli A. Horak, MD, who was also instrumental in bringing the Women in NM Medicine session to fruition.

Dr. Horak noted that beyond this session, “AANEM is also exploring possible mentoring opportunities which would be an excellent way to regularly address these issues.”

AANEM is pleased to report that the Women in NM Medicine special interest group session will be back again for the 2019 annual meeting.
Introducing AANEM Connect, Our New Members-Only Online Forum

As a member of AANEM, you already have one of the best resources readily available to you … your fellow AANEM members! There is a wealth of knowledge within the AANEM member community and now we’ve made it even easier for you to harness that knowledge through AANEM Connect.

“Sometimes questions arise in which the answers aren’t readily available in textbooks. Obtaining the input and experience from experts or other experienced members provides a valuable resource to improve the care of our patients.”

~ Devon I. Rubin, MD

“AANEM Connect is a place for our members to reach out to one another for guidance or advice. It’s another venue for members to connect with one another about professional matters and gives them a place to bounce ideas off of each other,” explained Jay Schwinefus, AANEM Marketing & Membership Director. “The overall hope is that it will serve as another resource to help our members deliver excellent patient care.”

AANEM Connect, accessible via www.aanem.org/connect, is a new online forum that enables members to ask questions of one another.

Devon I. Rubin, MD, believes the forum provides an opportunity for members to seek “real input on real questions that come up in everyday practice.”

“Sometimes questions arise in which the answers aren’t readily available in textbooks. Obtaining the input and experience from experts or other experienced members provides a valuable resource to improve the care of our patients,” said Dr. Rubin.

How does AANEM Connect work?
Before a member can use AANEM Connect, they need to agree to the terms and conditions of the site. Any AANEM member can post a question and any member can respond to that question; however, there is a volunteer team standing by to ensure that answers are provided to questions within 48 hours. AANEM Connect will be actively monitored on weekdays to ensure each question is receiving a response.

“If you have a question regarding the diagnosis or treatment of NM disorders or electrodiagnosis, don’t hesitate to submit it! It is very likely that others will have the same problem or question and would be interested in hearing the responses,” said Dr. Rubin. “Asking questions ultimately helps us learn and this is a great opportunity for more learning from each other. The more our members use the forum, the more valuable it will become!”

Engage with your fellow AANEM Members!
Submit a question or respond to one today!
www.aanem.org/connect
Dr. Suma Babu Receives AANEM Foundation Development Grant for Research on Spinal Cord Neuroinflammation in ALS Patients

In 2018, Suma Babu, MBBS, MPH, was selected as the recipient of an AANEM Foundation development grant. Dr. Babu, who is an Instructor in Neurology at Harvard Medical School and faculty in the NM division of Massachusetts General Hospital, will be using this funding to study the role of inflammation in the spinal cords of people living with amyotrophic lateral sclerosis (ALS). ALS is a neurodegenerative disorder affecting more than 15,000 Americans annually.

In her research study, Dr. Babu will be using state-of-the-art imaging techniques – simultaneously acquired Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) scans of the spinal cord to evaluate neuroinflammation, all without surgery. The PET dye to be used in the study – PBR28 – is specific for activated glia and quantifies inflammation of the central nervous system. Dr. Babu’s research builds on promising preliminary spinal cord PBR28-PET data obtained in ALS subjects showing glial activation in people living with ALS compared to healthy volunteers and seeks to characterize the clinical and biological relevance of this molecular imaging outcome.

“This is a very exciting study which will provide useful insight into the characteristics and patterns of spinal cord PBR28-PET uptake and will quantify spinal cord glial activation in vivo in ALS. The AANEM Development Award is a transformative early career opportunity for me, which will play a critical role in my career advancement in the field of ALS,” explained Dr. Babu. “The data generated by the study will inform the design of future longitudinal studies to understand how spinal cord inflammation impacts strength and function in ALS, and subsequently, clinical drug trials targeting neuroinflammation in ALS subjects with lower motor neuron dysfunction.”

“This award from the AANEM Foundation will help Suma create a niche of her own in ALS research focusing on neuroimaging of spinal cord as a potential objective biomarker and solidify her research skills in neuroimaging,” noted Anthony A. Amato, MD, Vice-Chairman of the Department of Neurology at Brigham and Women’s Hospital and Professor of Neurology at Harvard Medical School. “I envision her proposed study to be the first important step of many important future studies developing spinal cord imaging as a surrogate imaging biomarker in ALS.”

Dr. Babu’s research efforts as part of this grant began on April 1, 2018, and will continue through March 31, 2020. Dr. Babu will present the findings of this research at the AANEM Annual Meeting in Orlando, Florida in October 2020.
Dr. Carlo Rinaldi Receives Co-Funded AANEM Foundation/MDA Grant for Research on Spinal and Bulbar Muscular Atrophy

In 2018, Carlo Rinaldi, MD, PhD, was selected as the recipient of a development grant co-funded by the AANEM Foundation and the Muscular Dystrophy Association (MDA). Dr. Rinaldi, who works as an Associate Professor in the Department of Physiology, Anatomy and Genetics in the Division of Medical Sciences at the University of Oxford in the United Kingdom, will be using this funding to increase understanding of the pathophysiology of spinal and bulbar muscular atrophy (SBMA). SBMA is a NM disorder characterized by the degeneration of lower motor neurons and primary muscle atrophy. Dr. Rinaldi’s ultimate goal is to develop effective therapeutic treatments for this yet incurable condition.

Dr. Rinaldi’s research objective is to characterize the role of the androgen receptor (AR) isoform 2 on AR biology and its impact on SBMA toxicity. His central hypothesis is that AR45 is a key regulator of AR activity and represents a promising therapeutic target for SBMA.

“There is currently no treatment available for SBMA,” explained Dr. Rinaldi. “This research work has the potential to shed new light on the role of the AR isoforms in both health and disease, advance understanding of the mechanisms of pathogenesis in SBMA, and provide a new therapeutic target in close relationship with the disease-causing mutation.”

“Dr. Rinaldi has the strong support of the Neuroscience community in Oxford to pursue his research into the mechanisms of motor neuron degeneration in SBMA,” noted Kevin Talbot, MB, PhD, FRCP, Head of the Division of Clinical Neurology and Professor of Motor Neuron Biology and Consultant Neurologist at John Radcliffe Hospital in Oxford. “This is a neglected area and he is in an excellent position to be a leader in this field, both within Europe and worldwide.”

“This grant represents an incredible opportunity for me to build up an academic career as an independent investigator and develop my research program to its full potential,” Dr. Rinaldi said. “It also allows me the freedom to focus on the urgent mission of accelerating the discovery and development of treatments for SBMA.”

Dr. Rinaldi’s research efforts as part of this grant began on August 1, 2018, and will continue through July 31, 2021. Dr. Rinaldi will present the findings of this research at the AANEM Annual Meeting in Aurora, Colorado in October 2021.

About the AANEM Foundation and MDA Partnership
A unique partnership between the AANEM Foundation and the Muscular Dystrophy Association (MDA) offers expanded funding opportunities for NM research. NM research projects submitted to MDA that fit within the AANEM Foundation’s mission may be considered by the AANEM Foundation for co-funding.

Check In With Dr. Mattia Quattrocelli and His 2017 Funded Research Project

In 2017, Mattia Quattrocelli, PhD, of the Center for Genetic Medicine at Northwestern University in Chicago, Illinois, received a 3-year development grant co-funded by the AANEM Foundation and the MDA for his research initiative titled, “Glucocorticoids in Fiber Repair and Regeneration of Dystrophic Muscles.” AANEM recently checked in with Dr. Quattrocelli for a progress update on his research.

Continued on next page
Tell us about the research you conducted with AANEM Foundation and MDA funding.

My research is focused on maximizing efficacy and minimizing side effects of glucocorticoid steroid dosing in patients with NM diseases, such as muscular dystrophies. Glucocorticoids are currently recommended only for patients with Duchenne muscular dystrophy, where they elongate ambulatory age but induce burdening side effects, such as obesity, metabolic dysfunction and osteoporosis.

What were the findings of your research?

I discovered that different dosing regimens with glucocorticoids elicit divergent effects on dystrophic muscle. Daily dosing, which is the mainstay for clinical treatment, reduces muscle damage and fibrosis, but also alters muscle metabolism to favor insulin resistance and decrease force production. Conversely, pulsatile dosing of glucocorticoids (e.g. once weekly or two consecutive days per week), originally proposed in the early 2000s by Dr. A. Connolly (Washington University School of Medicine in St. Louis, MO), promotes muscle metabolism, nutrient transformation in energy and force production. These divergent molecular programs translate in decreased metabolic dysfunction and side effects with pulsatile regimens than with daily regimens. Intriguingly, these trends were confirmed in animal models of not only Duchenne muscular dystrophy, but also other types of NM diseases, such as limb-girdle muscular dystrophies type 2B and 2C. Finally, I also investigated how the glucocorticoid-regulated pathways of dystrophic muscle repair are regulated by genetic modifiers that affect the TGFβ pathway.

How do you think your research will benefit physicians and/or patients?

If these trends will be confirmed in patients, this research will greatly inform use of glucocorticoid steroids for NM disease treatment and potentially extend indications to other diseases beyond Duchenne muscular dystrophy.

Are you still conducting research in this topic area?

I am further expanding my research to investigate, in greater detail, the molecular and metabolic mechanisms discriminating regimen-specific effects. I will also be assessing the translational relevance of these findings in patients, through analyses of clinical data and biomarkers from patients with Duchenne and possibly other NM disorders.

How did funding from the AANEM Foundation benefit you and your research efforts?

Funding from the AANEM Foundation directly supported my salary and will help me transition from a postdoctoral to an independent academic position in the near future.

What would you say to encourage others to apply for research funds from the AANEM Foundation?

The AANEM Foundation offers an ideal hub for researchers involved in the fight against NM disorders, as it brings together questions and opportunities from both clinical and research sides. Therefore, AANEM-backed funding presents a great opportunity to conduct relevant research with translational potential.

Read more about Dr. Quattrocelli’s research:

- Intermittent glucocorticoid dosing improves muscle repair and function in mice with limb-girdle muscular dystrophy
  November 2017 – The American Journal of Pathology
- Genetic modifiers of muscular dystrophy act on sarcolemmal resealing and recovery from injury
  October 24, 2017 – PLOS Genetics
- Intermittent glucocorticoid steroid dosing enhances muscle repair without eliciting muscle atrophy
  June 2017 - Journal of Clinical Investigation
Hattie’s World with SMA: Donuts, Dinosaurs, and Doctor Visits

“Her favorite thing is to play.”

Hattie McBride, 2, plays with princesses, dinosaurs, and Mickey and Minnie. She dons a cape to become a superhero, colors pictures with her crayons, and gets her fingers dirty with Play-Doh.

Playtime is standard in Hattie’s life, but so are her visits to the doctor … which have become more frequent since being diagnosed with spinal muscular atrophy (SMA) strong type 2 earlier this year.

“Hattie’s SMA was discovered by a genetic test, but that’s not where it started,” explained Hattie’s mom, Kelsey. “When Hattie was about 18 months and still not walking, we became concerned. Hattie’s feet turn in a lot, almost as if she stands on the inside of her feet. The physician was not concerned, but we wanted to do something. Hattie ended up getting SMOs – orthotics to correct foot and ankle alignment – and we started physical therapy.”

Despite these measures, Hattie’s parents were not seeing any progress. So, they contacted Texas Children’s Hospital to meet with a physical therapy specialist.

“She ordered an MRI, but that came back clear, so she sent us to a neurologist because Hattie lacked reflexes. The neurologist ordered a muscle and nerve test and that’s where they found something,” Kelsey recalled.

Kelsey remembered the neurologist saying that Hattie would be tested for SMA to “get that out of the way in case it was negative.” Kelsey said the neurologist advised her and her husband to not do any research on SMA “because it can be scary.”

“She didn’t want us upsetting ourselves because we needed to wait for the test results. However, as parents and not knowing what SMA was, we looked it up. It was, indeed, scary, and we prayed that our Hattie didn’t have it.”

Hattie’s test results confirmed that she did, in fact, have SMA.

“Even though all signs pointed to SMA … to have it confirmed was just heart shattering. It was life altering news. A million thoughts went through my mind like, ‘How are we going to get through this?’ and ‘How will we afford the things she needs?’”

When the scary thoughts and worries passed, Kelsey and her husband determined they would simply take things one step at a time.

“We realized what a blessing in disguise this really is. Hattie was a blessing from the beginning and we are grateful that God blessed us with such an outgoing little girl. No matter what, we would figure this out and love her unconditionally,” Kelsey stated.

SMA is a disorder that causes weakness and wasting of muscles. The condition may be acquired or hereditary. The hereditary SMA syndromes are genetic diseases that cause motor neurons in the spinal cord to degenerate and die, causing muscle weakness.

Hattie’s parents immediately got on the waiting list for Spinraza® (Biogen’s FDA-approved treatment for SMA). It took 5 months, but ultimately, their insurance approved the treatment.

“Hattie just received her fourth shot in October 2018. Before she started the shots, Hattie was getting checkups with the neurologist, pulmonologist, physical therapist, nutritionist, and orthopedics every other month. Now that she’s on Spinraza, we’re visiting them every other week. Our doctors are in Houston, Texas, and we live in Louisiana, so this is a 2-hour drive for us each time,” noted Kelsey.

However, the doctor visits should subside since Hattie just received her fourth dose.

“Hattie will receive maintenance doses every 4 months for the rest of her life and will continue with whatever checkups are needed in between.”

Kelsey says the drug treatments have positively impacted her daughter.

“Hattie can now stand up when holding on to something and do calf raises. Her speech has improved and she does not hardly get her little tremors anymore. They are small steps … but they mean so much!”

Kelsey’s dream would be for researchers to find a cure for her daughter.

“This disease is cruel and it takes the lives of children and their independence away, some faster than others. Each child deserves a chance to live a better quality of life than they do with SMA. To never see your child run or dance, or for some, to never see their child leave their wheelchair or bed, is just frustrating and completely heartbreakingly.”

That’s why, Kelsey says, research on NM diseases, like SMA, is very important.

Continued on next page
“Through this research, scientists can hopefully find even more ways to improve the lives of children with SMA. Maybe they’ll even find a cure. That’s the big goal.”

And to Kelsey and Hattie, donations from the public mean everything.

“There isn’t much awareness. But it is so very crucial that we continue studying this disease and its effects.”

“Hattie deserves a good life and that’s what we want to give her.”

In the meantime, Kelsey is excited to celebrate Hattie’s third birthday this month. The theme involves two of Hattie’s most favorite things – donuts and dinosaurs.

“My Hattie is a spunky girl who does not let this disease get in her way. She is smart and resilient, beautiful on the inside and out, and on top of that, the strongest little girl I know.”

So many patients need your help!

Donate to the AANEM Foundation to fund much needed scientific research on NM diseases.

Even a small donation can make a difference.

aanemfoundation.org/donate
Capitalizing on 2018 Meeting Location With Capitol Hill Visits

Location! Location! Location! Having AANEM’s 2018 meeting in the greater Washington, DC area proved advantageous from an advocacy perspective as several AANEM members seized the opportunity to visit with representatives on Capitol Hill.

“The visits were important to give updates on AANEM’s anti-fraud and pro-quality efforts in EDX medicine and patient care,” said John C. Kincaid, MD, who visited the offices of Indiana’s legislators.

“Many people aren’t familiar with the details of EDX testing, so each visit started off with a brief explanation of what this testing entails and how it can be an invaluable diagnostic tool,” explained Kara Stavros, MD, who visited the offices of Rhode Island’s legislators. “The main topic of discussion was fraud and abuse in EDX testing and how this affects both patients and physicians.”

William Jens, DO, met with staff members for Pennsylvania’s legislators.

“We discussed enacting minimum requirements for performing nerve conduction studies that include real time evaluation, minimum equipment requirements, as well as minimum training requirements for needle EMG testing (2-3 months during training), and how such minimum requirements would help reduce fraud and improve patient care,” said Dr. Jens.

AANEM members are confident Capitol Hill staffers were receptive to the discussions.

“We have continued over the past several years to share our message, and there is increased optimism that our message is being heard and acted upon,” noted Vincent J. Tranchitella, MD.

“I found the legislative assistants to be very interested and engaged in the topic, and eager to hear more in the future,” said Dr. Stavros.

“I felt we gave an impassioned and informative pitch to the lawmakers that will hopefully result in positive legislation,” stated Dr. Jens.

There is strength in numbers, and those that visited Capitol Hill in October 2018 encourage other AANEM members to get involved in advocacy efforts.

“It’s important for individual members to bring the ‘in the trenches’ message directly to Senators and Congress,” said Dr. Kineaid. “If you want to become more active in advocacy, I say, ‘Just Do It!’ Do not expect instant results, but know that the efforts make a difference in the long-term.”

“Traveling to DC in person and sharing stories from the patients in our practices sends a powerful message,” noted Dr. Stavros. “If there is an issue that is important to you and your patients, don’t hesitate to reach out to the AANEM or your state neurological or physiatric society to find out how you can get started with advocacy efforts. These organizations can provide valuable information and resources.”

“The more voices we have, the louder our message becomes,” Dr. Jens emphasized.

If you’re interested in getting more involved in AANEM’s advocacy efforts, consider applying for a position on the State Liaison Committee. To find out if there is an opening for your state, visit www.aanem.org/StateLiaisons.

“The more voices we have, the louder our message becomes.”

~ Dr. Jens

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Each year, AANEM dedicates efforts to advocate on behalf of NM specialists and their patients, and 2018 was no exception. Below is a recap of AANEM’s advocacy efforts from the past year.

• **New position statement:** The Professional Practice Committee is working on a final draft of a new position statement detailing what constitutes a proper waveform. This document will assist members with quality assurance by providing a standard to which they may compare their studies. Additionally, the position statement will help members identify fraudulent or poor quality studies or providers.

• **Met with CMS:** Policy Director, Millie Suk, JD, MPP, Executive Director, Shirlyn Adkins, JD, and AANEM Advocacy Advisors, Peter A. Grant, MD and Vincent J. Tranchitella, MD, along with AANEM’s DC lobbyists, met with members of the Provider Compliance Group at the Centers for Medicare and Medicaid Services (CMS) in May 2018 to discuss problems and potential solutions related to quality EDX care.

• **5th Annual Hill Day:** AANEM hosted its 5th Day on Capitol Hill in May 2018. AANEM’s state liaisons met with dozens of congressional offices, discussing the importance of quality in EDX medicine, the need for increased funding for NIH research and all of the problems posed by CMS’s Quality Payment Program, along with some proposed solutions. AANEM also arranged congressional meetings for all interested AANEM members during its annual meeting in Washington, DC in October 2018.

• **Defended CNCT Certification:** In what appears to be a nationwide trend, both Illinois and Louisiana sought to pass legislation that would have impeded the ability of CNCT-certified technologists to promote their certification. AANEM joined forces with several other organizations in both states and defeated these efforts. AANEM has also joined a national coalition to help fight these efforts nationwide.

• **Comment Letter on MACRA/QPP Rule:** AANEM submitted a detailed comment letter on CMS’s proposed rule for year 3 of the Quality Payment Program (QPP). CMS accepted many of AANEM’s suggestions and made several changes to help ease the administrative burden on physicians, especially for those in small or solo practices.

AANEM will return to Washington, DC for its 6th Annual Hill Day in May 2019. Prior to that, a smaller group of AANEM representatives will fly out to meet with some of the new congressional leaders of key healthcare committees to ensure they fully understand all issues of importance to AANEM.

Would you like to help support AANEM’s advocacy efforts? Consider a donation to the AANEM Advocacy Fund today! [www.aanem.org/Advocacy/Advocacy-Fund](http://www.aanem.org/Advocacy/Advocacy-Fund).
PRACTICE

2019 CPT Code Changes

In fall 2018, the American Medical Association (AMA) released the 2019 current procedural terminology (CPT) code changes that went into effect January 1, 2019. There were some minor changes and additions relevant to EDX and NM medicine and the AANEM Online Coding Guide has been updated to reflect these changes (visit www.aanem.org/Practice/Coding-and-Billing). The 2019 Guide also includes new coding tips and an updated frequently asked questions list.

CPT code changes that may interest AANEM members include:

- **Intraoperative Neurophysiology**: The parenthetical note following intraoperative monitoring code 95941 has been revised in conjunction with changes made to neurostimulator services reporting. This includes removal of neurostimulator codes 95970 and 95975. Neurostimulator codes 95971, 95972, 95976, 95977, 95983, and 95984 were also added to the guideline.
- **Muscle Biopsy**: A parenthetical note following 20206 (muscle biopsy) has been revised to direct users to codes 10004-10012 and 10021 for fine needle aspiration (FNA) biopsy procedures.
- **Ultrasound Guidance**: A parenthetical note has been revised following 76942 (ultrasound guidance for needle placement) to direct users to the new and revised codes to report FNA procedures (10004-10006, 10021).
- **Epidurography**: In accordance with the deletion of Category III codes 0195T and 0196T for arthrodesis of the L4-L5 and L5-S1 interspace, the parenthetical note referencing these codes following code 72275 (epidurography) has been updated to reflect these deletions.

Questions? Please contact Carrie Winter in the AANEM Policy department at policy@aanem.org.

Highlights of the 2019 Medicare Physician Fee Schedule

The Centers for Medicare and Medicaid Services (CMS) released its Final Rule of the 2019 Physician Fee Schedule on November 1, 2018. If you haven't read the 2300+ page document plus addendum, here is a brief summary of items that could affect you and your practice:

- **Work Relative Value Units (RVUs)** for all EDX and NM codes monitored by AANEM remain unchanged.
- **Practice Expense RVUs** and **Malpractice RVUs**. Small adjustments were made to the practice expense RVUs of the nerve conduction study and needle EMG codes that resulted in slight changes in reimbursement. Malpractice RVUs remained the same for 2019.
- **Conversion Factor**. CMS finalized the conversion factor for Calendar Year (CY) 2019 at $36.0391. This is an increase of $0.0395 from 2018.
- **Evaluation and Management (E/M) Guidelines**. CMS finalized several changes to E/M documentation guidelines:
  - The requirement to document medical necessity of furnishing visits in the home rather than office will be eliminated.
  - Physicians will no longer be required to re-record elements of history and physical exam when there is evidence that the information has been reviewed and updated.
- **Teaching Physician Documentation Requirements for E/M Services**. CMS is revising federal regulations by allowing the presence of the teaching physician during E/M services to be demonstrated by notes in the medical record made by a physician, resident, or nurse. The medical record must document the extent of the teaching physician’s participation.
Medicare’s Quality Payment Program (QPP) will be in its third year in 2019. All physicians who bill Medicare Part B and do not qualify for an exemption are required to participate in the program or face a payment penalty of 7% of their Medicare Part B payments. To find out whether you are required to participate, you may look up your NPI on the Centers for Medicare and Medicaid Services’ (CMS) QPP website at https://qpp.cms.gov/.

AANEM policy staff reviews the final rule each year and it appears CMS is listening to the extensive feedback provided by various medical associations and groups, including the AANEM. For 2019, CMS continues some accommodations for small practices, exempts many physicians who see only a small number of Medicare patients and attempted to simplify and reduce the burden of the QPP. However, the program remains complex and there continues to be significant room for improvement. AANEM will continue its efforts with CMS and other stakeholders to decrease the burdens and increase the efficacy of the program.

Changes to the QPP for Performance Year 2019 include:

- **Low-Volume Threshold and Opt-In Policy.** CMS added a third criterion for physicians to qualify for the low-volume threshold—providing 200 or fewer covered professional services to Part B patients. CMS also adopted a new policy

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
<th>Year</th>
<th>Work RVUs</th>
<th>Non-Facility PE RVUs</th>
<th>Malpractice RVUs</th>
<th>Total Non-Facility RVUs</th>
<th>Non-Facility Reimbursement (in dollars)</th>
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<td>Needle EMG; done with NCS; limited</td>
<td>2019</td>
<td>0.35</td>
<td>1.36</td>
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**2018-2019 Relative Value Unit (RVU) Comparison—Nerve Conduction Studies and Needle EMG**

For a detailed summary of changes to RVUs for codes specific to EDX and NM medicine, members may visit the Practice section of the AANEM website and log in to view Member-Only Coding Resources.

If you have any questions, please contact the AANEM policy department at policy@aanem.org.
Quality Category

The Quality Category is now worth 45 (instead of 50) percent of a clinician's score. CMS maintains a full-year reporting period for the Quality Performance Category. They also maintained the data completeness criteria of 60% of all denominator eligible patients and the requirement of a minimum of 20 cases for each measure. Other changes to this category include:

- **Meaningful Measures Initiative.** As part of this initiative, CMS finalized the addition of 10 new quality measures and the immediate removal of 26 measures in 2019. None of these measures are likely to impact EDX or NM physicians.

- **New Reporting Option.** CMS will now allow for a combination of data collection types for the Quality Performance Category. If you report the same measure using more than 1 submission mechanism (e.g., claims and EHR), CMS will only count the measure based on the most successful collection type. The multiple-submission type option does not apply to groups who use CMS's Web-Interface for reporting.

- **Small Practices.** CMS maintained the 3-point floor for quality measures that do not meet the data completeness requirement. CMS moved the small practice bonus points to the physician's quality category score, but increases it to 6 points.

Cost Category

The Cost Category is now worth 15 (instead of 10) percent of a clinician's score. CMS retained the 2 existing cost measures (Medicare Spending Per Beneficiary and Total Per Capita Cost of Care) with no changes, but added 8 new episode-based measures in 2019 (none of which are likely to impact EDX or NM physicians). All measures include both Part A and Part B costs and are calculated from administrative claims.

For a comprehensive overview of the QPP and guidance on how NM and EDX physicians can succeed in the QPP, view AANEM's QPP Guide (members only) at www.aanem.org/Practice/Medicare/MACRA.

Questions? Please contact the AANEM Policy department at policy@aanem.org.
ABEM Certification Opportunities for 2019-2020

Certified Nerve Conduction Technologist (CNCT) Spring Exam
Registration Opened January 1, 2019
Registration Deadline: February 28, 2019
Exam: April 3 or 6, 2019

CNCT Fall Exam
Registration Opened: August 1, 2019
Registration Deadline: September 30, 2019
Exam: November 6 or 9, 2019

This credential shows the professional community and the public that the CNCT technologist has achieved competency in the performance of nerve conduction studies.

Maintenance of Certification Program (MOCP) Exam
Registration Opens: August 1, 2019
Registration Deadline: September 30, 2019
Exam: November 20 or 23, 2019

ABEM Initial Certification Exam
Registration Opens: October 1, 2019
Registration Deadline: November 30, 2019
Exam: March 4-7, 2020

The ABEM certificate is valid for 10 years. To maintain ABEM certification, prior to the certificate’s expiration, ABEM Diplomates must successfully pass the MOCP exam which tests fundamentals in EDX medicine as well as current and clinically valid practice-related knowledge.

ABEM certification signifies that a physician has passed the most comprehensive examination in EDX medicine. This certification is recognized nationally and internationally and demonstrates a physician’s dedication to providing a high level of quality in EDX medicine.

Dates are subject to change.
Visit www.abemexam.org for more information.
The American Board of Electrodiagnostic Medicine (ABEM) is pleased to announce that in September 2019, it will be offering a Neuromuscular Ultrasound Certificate of Added Qualification (NM US CAQ) as an additional certification available to ABEM certified physicians. ABEM will be the first certifying organization to offer this CAQ.

“I am excited about the initiative ABEM has taken to establish a certificate of added qualification (CAQ) for NM ultrasound,” said Michael S. Cartwright, MD, and chair of the ABEM’S NM US CAQ committee. “NM US is an important complement to electrodiagnostic testing and has a growing presence in electrodiagnostic laboratories worldwide. As more training programs incorporate neuromuscular ultrasound, use of this powerful diagnostic tool will continue to grow. By obtaining this CAQ, physicians can demonstrate their knowledge and skill in this technique.”

Please note that the ABEM’s NM US CAQ is not yet available. The first exam will be offered September 2019.

Eligibility Requirements
Candidates must meet eligibility requirements for the year in which the examination is taken, regardless of prior approval. Eligibility does not automatically carry over from year to year.

Candidates must:
1. Hold a valid, unrestricted license to practice medicine.
2. Be board certified by either the ABPN, ABPMR, AOPN, AOPMR or the Canadian equivalent.
3. Be board certified by ABEM.
4. Have conducted and/or interpreted 150 NM US examinations on suitable patients over the past 36 months, with 15 or fewer being for needle guidance.

Further Details
- The NM US CAQ will be a one-time exam. Once a physician obtains this CAQ, no maintenance of certification will be required.
- Primary ABEM certification must be maintained in order to maintain the CAQ.
- As noted, the NM US CAQ Exam is not yet available. The first exam will be offered September 2019.
- Interested in taking the NM US CAQ Exam? An interest form is available at www.abemexam.org.

If you have any questions, please contact the ABEM office at 507.288.0100.

Congratulations to ABEM’s Newest CNCT-Certified Technologists!

The following technologists successfully passed the November 2018 Certified Nerve Conduction Technologist (CNCT) Certification Examination.
- Alfred Bernardo, CNCT
- Ullas Kotian, CNCT
- Janelle Sibley, CNCT
AANEM’s Featured Labs

AANEM asked leaders at EDX laboratories why they decided to complete the AANEM lab accreditation process. These leaders discuss the benefits they have seen from being an accredited laboratory and answer other questions to help those who may be currently considering lab accreditation by the AANEM. We are always looking for new labs to feature, so please visit our AANEM site to nominate your lab at www.aanem.org/FeaturedLab.

*Henry Ford Hospital Electrodiagnostic Lab*
*Lab Medical Director: Naganand Sripathi, MD*

**What prompted you to accredit your lab initially?**
To demonstrate to the medical community that our lab was performing high quality EDX studies.

**What value or benefits have you seen from accreditation?**
Increased referrals from insurers and outside practitioners who prefer to use accredited labs as well as recognition from internal and external practitioners about the quality of the studies provided.

**What did you learn by going through the accreditation process?**
The AANEM staff was very helpful in facilitating the process toward achieving accreditation and the process was not as hard as it seemed in the beginning.

**Why should others accredit their laboratory?**
It will help you gain recognition about meeting standards in the EDX medicine. It will also increase your exposure locally and nationally.

*EMG Labs of Arizona Arthritis & Rheumatology Associates, P.C.*
*Lab Medical Director: Benjamin M. Sucher, DO*

**What prompted you to accredit your lab initially?**
I believed it was important to demonstrate to the medical community and insurance industry that our lab was making an effort to practice EDX medicine at a level of excellence to ensure patient protection and high quality studies.

**What value or benefits have you seen from accreditation?**
Recognition from colleagues that our lab is dedicated to maintaining quality and safety in electrodiagnosis and increased referrals from insurers or third parties who prefer to use accredited labs.

**How did the accreditation process help you shore up or improve processes and procedures?**
We enhanced our program of electrical safety checks on all of our EDX machines and formalized the process with documentation annually.

**What did you learn by going through the accreditation process?**
I learned that I was already producing good EDX reports that met the AANEM lab accreditation standards; that the AANEM staff was very helpful in facilitating the process toward achieving accreditation; and, overall, it was less onerous than I initially thought it would be.

**Did anything about the accreditation process surprise you? If so, what?**
I was surprised how we were already meeting most of the requirements, but just had not collated all the documents in one place.

**Why should others accredit their laboratory?**
It will help any EDX lab to demonstrate that they can also meet these standards and set themselves apart from others who are less concerned or able to protect patients and produce high quality EDX studies.

**Additional Comments**
AANEM is an outstanding organization, dedicated to helping anyone who is committed to excellence in EDX medicine. All EDX clinicians should take the opportunity to participate with AANEM and achieve lab accreditation.
SSM Saint Louis University Clinical Neurophysiology Laboratory
Lab Medical Director: Ghazala Hayat, MD

What prompted you to accredit your lab initially?
To ensure quality of care to diagnose NM disease.

What value or benefits have you seen from accreditation?
The accreditation process was an opportunity to do a comprehensive internal and external review of our clinical neurophysiology laboratory. Successful accreditation is a privilege and assurance that we are providing high quality neurophysiology procedures for our patients.

How did going through the accreditation process help you shore up or improve processes and procedures?
We internally reviewed all physicians’ NCS/EMG reports, discussed a variety of procedural techniques and standardized the reports with a brief history and limited examination before the study data, interpretation, and conclusion for the completeness.

What did you learn by going through the accreditation process?
Our clinical neurophysiology laboratory has been consistently running with the same standard over the past 30 years. Although staff and faculty have changed over time, our laboratory maintains a high quality of procedures to maintain accreditation.

What was the most challenging portion of the application?
There are many documents required for the accreditation process from individual physicians, technical support, and the hospital. It requires cooperation from everyone in the laboratory and is time consuming.

Why should others accredit their laboratory?
It’s important to ensure quality of care for patients who are evaluated for NM disorders and undergoing electrophysiological studies.

2018 Lab Accreditation by the Numbers

| States | 46 |
| Main Labs | 215 |
| Labs (including satellites) | 373 |
| Techs in Accredited Labs | 270 |
| Physicians in Accredited Labs | 614 |
Congratulations to All Labs Accredited or Reaccredited in 2018!

AANEM would like to recognize the following labs for earning their accreditation or reaccreditation in 2018. All labs listed below completed accreditation or reaccreditation prior to December 1, 2018.

**Accredited**
- Cabell Huntington Hospital Neurophysiology
- Jeryl J. Wiens, MD/Sierra Pacific Orthopedics
- Sanford Clinic Brain & Spine Center

**Accredited with Exemplary Status**
- Angel Gonzalez MD/Clinical Neurophysiology Lab
- Barrow Neurological Institute EMG Lab
- Bon Secours Neurology Clinic at Westchester
- Nationwide Children’s Hospital PM&R Electrodiagnostic Laboratory
- Performance Pain and Sports Medicine
- Rhode Island Hospital EMG Lab
- Spectrum Health Department of Neurosciences EMG Laboratory at ICCB
- Texas Children’s Hospital Electrodiagnostic Laboratory
- University of Connecticut Storrs Center

**Reaccredited**
- Bill D. Davis, MD, PA National Neurodiagnostic Technologies, Inc./NeuroDx
- Brevard Rehabilitation Medicine
- Donald A. Lakatos, MD EMG-EEG Consultants
- High Country Neurology Electrodiagnostic Laboratory
- Houston Neurology & Sleep Diagnostic Center
- Jewett Orthopaedic Clinic Electrodiagnostic Lab
- Justin Willer, MD, PC Ogden Clinic EMG Laboratory
- Philip D. Zaneteas, MD, PhD Physical Medicine & Rehabilitation – Tower Health Medical Group
- Sergey V. Bogdan, MD, PC The Neurology Center of Southern California
- University of Texas Health Science Center at Houston EMG Lab

To learn more about AANEM’s EDX Laboratory Accreditation Program, visit www.aanem.org/Accreditation.

Check Out the New Accreditation Dashboard

The AANEM EDX Lab Accreditation Program webpage recently received a small facelift to make the site more user-friendly and beneficial for accredited labs and those interested in becoming accredited.

The site now includes an Accreditation Dashboard which allows users to access accreditation status information, publicity materials, application resources, The Lab Report (newsletter), and Featured Lab profiles.

“Several of these pages were available in the past, but were not easily accessible. Our new and improved Lab Accred site was designed as a one-stop-shop for all things lab accreditation, so it should really improve our lab accred website experience for people visiting the page,” said Anna Vredenburg, AANEM Professional Standards Senior Coordinator. “If you’ve started a lab accreditation application or your lab is already accredited, the Accreditation Dashboard will be the lab accred page for you to use moving forward.”

The Accreditation Dashboard includes:
- **Accreditation Lifecycle:** Initial accreditation, Annual Compliance Reports or Reaccreditation application buttons will populate when your lab is within the completion window for each of these tasks.
- **Application Resources:** Patient report checklists, model policies, electrical inspection fact sheet and other resources helpful for accreditation and reaccreditation.
- **The Lab Report:** Easy access to the newsletter articles published in The Lab Report, a new email publication to be sent to accredited labs.
- **Featured Labs:** See why other labs earned their accreditation. Interested in showcasing your lab? Complete the Featured Lab form to shine the spotlight on your laboratory.
- **Publicity Materials:** Take advantage of easily accessible logo files, press releases, folders, folder inserts, brochures and more.

Is your laboratory accredited or in the process of becoming accredited? Check out the Accreditation Dashboard today at www.aanem.org/AccreditationDashboard.
Debut of New Quarterly Lab Report Newsletter

Accredited laboratories will soon start receiving a new email publication from AANEM -- The Lab Report. The purpose of the publication is to provide additional value to labs in the AANEM EDX Laboratory Accreditation program as well as increase the sense of community amongst lab accreditation participants.

The newsletter will feature relevant news and information specific to accredited labs (e.g., details about how many labs are accredited and how many physicians are employed by accredited labs, etc.) as well as guest columns from accredited labs.

Your fellow labs will be highlighted in the Featured Labs section to enable you to find out why they became accredited, their thoughts about the lab accreditation process, and how accreditation has impacted them. We are always looking for new labs to feature, so please visit our AANEM site to nominate your lab at www.aanem.org/FeaturedLab.

We are still determining the appropriate frequency for The Lab Report; however, we anticipate it will be sent on a quarterly basis. Please send your feedback to accreditation@aanem.org.

"Initially, I thought EDX Lab Accreditation was going to be a lot of work, but following the accreditation checklist was easy. It was a worthwhile process to ensure our EMG lab was in line with accreditation standards. I’m pleased to say that now we are an accredited lab with Exemplary Status."

Douglas M. Pavlak, MD
OA Centers for Orthopaedics
Accredited Laboratory with Exemplary Status
# AANEM Calendar of Events

<table>
<thead>
<tr>
<th>2019</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
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<tr>
<td></td>
<td>7-9 AANEM representatives attend the CPT Editorial Panel Meeting in Tucson, AZ</td>
<td>13-16 Ultra EMG Program in San Diego, CA</td>
<td>13-16 Administration of the 2019 ABEM Examination</td>
<td>6-15 Proctored Electrodiagnostic &amp; Neuromuscular Self-Assessment Examinations</td>
<td>1 Abstract award recipients notified</td>
<td>1 2019-2020 Training Program Partnerships Begin</td>
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<td>18 Early bird registration ends for 2019 proctored EDX and NM Self-Assessment Examinations</td>
<td>15 Abstract submission deadline for 2019 AANEM Annual Meeting</td>
<td>6 Registration ends for proctored EDX and NM Self-Assessment Exams</td>
<td>9-11 AANEM representatives attend the CPT Editorial Panel Meeting in Chicago, IL</td>
<td>8-12 AANEM representatives attend the AMA House of Delegates meeting in Chicago, IL</td>
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<td>28 Spring CNCT Examination application and refund request deadline</td>
<td>15 Golseth Young Investigator Award manuscript submission deadline</td>
<td>24-27 AANEM representatives attend the RUC meeting in Chicago, IL</td>
<td>19-20 State Liaisons meet and conduct Hill visits in Washington, DC</td>
<td>27 Early bird registration for AANEM 2018 Annual Meeting in Austin, TX begins</td>
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<td>13-16 AANEM representatives attend the CPT Editorial Panel Meeting in Chicago, IL</td>
<td>15 Foundation and IFCN annual meeting travel scholarship deadline</td>
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MARCH 2019 | A SUPPLEMENT TO NEUROLOGY REVIEWS

In celebration of Rare Disease Day — February 28, 2019 and the success of previous Special Reports, Neurology Reviews, in collaboration with the National Organization for Rare Disorders (NORD) will publish our 5th annual Rare Neurological Disease Special Report.

- Advertising in this Special Report will provide your corporate or brand message with a powerful multichannel platform within timely and relevant editorial content.

- The editorial content will be developed by Neurology Reviews and NORD and will include rare disease information, medical conference coverage, and exclusive interviews with rare disease experts.

- The Special Report will be converted into a digital edition (electronic magazine) and hosted on the Neurology Reviews website for 12 months to provide advertisers with additional reach and visibility.

FOR MORE INFORMATION, CONTACT:
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ekatz@mdedge.com  |  973-224-7951
Toni Haggerty, Senior Director of Business Development, Neurology Reviews
thaggerty@mdedge.com  |  856-296-5705
Don’t Miss the 2019 Annual Meeting!

Austin, Texas | October 16-19, 2019