Neurophysiology Research and Education Consortium Database

The Neurophysiology Research and Education Consortium (NREC) is a non-profit corporation that is primarily interested in improving the field of intraoperative neurophysiologic monitoring through collection of multicenter outcomes data. The NREC has worked for the last 2 years to create a HIPAA compliant website that can be used to collect data regarding intraoperative neurophysiologic monitoring. This site is now ready for data entry.

The creation of a multicenter outcomes database is a very important step in the development of the field of intraoperative neurophysiologic monitoring as it was for the field of cardiac surgery (which created the Society of Thoracic Surgeons database many years ago). Since complications of surgeries such as the correction of scoliosis are rare but devastating, only in the study of large amounts of information from many different centers can we begin to objectively prove the value of intraoperative neurophysiologic monitoring.

Why Should I Participate?

There are many benefits to participation in the NREC process. First, the field of IONM as a whole will benefit from the information that the NREC will produce. The NREC will generate information on the interpretative criteria used by different practitioners along with the incidence of significant intraoperative changes in the recorded neurophysiologic signals. This will lead to information about how the interpretative criteria influence IONM. It will also provide information on the frequency with which changes are seen in various monitored variables in different surgical procedures. Collecting outcomes information may, especially if significant data on cases where monitoring was aborted is entered, provide information on the overall utility of various monitoring modalities. All of this information will be of vital importance as a tool to support the use of IONM to insurance companies, hospitals and surgeons. As information on the skills of the practitioner involved in the case are acquired as well, information on how the credentials and education of practitioners affect the surgical outcome will be also available. This will be important not only to practitioners themselves but to educational programs in the field. The data will be made available to the public through publications at regular intervals as the size of the database grows to significant numbers to analyze statistics and trends.

Second, individuals who submit more than 50 cases in a year may request that the NREC provide them with comparisons between their practice and that of the average practitioner in the NREC database. This information will be extremely valuable for confidential internal quality assessment/quality improvement purposes, although no information derived from the NREC can be released for publication in any form whatsoever without prior written approval of the NREC.

Third, individuals who submit more than 50 cases in a year may submit a request to add or modify questions used in the study.

How Do I Enter Data?

In order to enter data, first find out from your local institutional review board (IRB) whether they will require an application prior to entering data. If you need to submit such an application, contact Mark Stecker (mmstecker@gmail.com) and the NREC can provide you with information about its approval status with the University of Texas and can provide more details about the database. If IRB approval is required, typically only expedited approval would be required, however; this decision is made by the local IRB.

The address of the website is https://www.nrec.info. If you are new to the site, you may create a user name and password. It is important that as a part of

Continued on page 12

Don’t let this be your last ASET Newsletter!

If you haven’t already renewed your ASET membership, do so TODAY!

Visit us online at www.aset.org or call 816.931.1120
Contents

BOARD OF TRUSTEES. ......................... 3
FROM THE EXECUTIVE DIRECTOR’S DESK ...... 5
MEMBERSHIP NEWS & SERVICES. ............. 7
ASET FOUNDATION. ......................... 10
EDUCATIONAL AND PROFESSIONAL
DEVELOPMENT. ................. 11
2010 ANNUAL CONFERENCE ................. 13
TECH TIPS ................................. 15
INTEREST SECTION BRIEFINGS .......... 16
CREDENTIALING ORGANIZATIONS ....... 23
READY REFERENCES .................... 24
WORKSHOPS, COURSES AND SEMINARS .... 25
CALENDAR OF EVENTS .................. 26

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OUR MISSION

The American Society of Electroneurodiagnostic Technologists, Inc. [ASET] provides leadership, advocacy and resources that promote professional excellence and quality patient care in electrophysiology. As a membership organization, ASET advances the field of electrophysiology by serving member needs, defining and endorsing standards of practice, providing innovative educational opportunities, promoting the profession and building coalitions in allied health and other communities of interest.
The Spirit of Inclusion

As this holiday season surrounds us with the spirit of giving, I find myself repeatedly thinking of another type of spirit, the spirit of inclusion. We find the spirit of inclusion enmeshed in our political system and in the founding beliefs of our great nation. At times fear and pride challenge our inclusive intentions, but I believe as a nation we are succeeding in this arena. As a society of professionals in neurophysiology, I would like to propose this same challenge of inclusion.

Who am I calling to this challenge? – You and I, the members of this Society. Who am I challenging us to include? – We must seek out those of us who live in our own cities and towns—technologists working in hospitals or physician offices who are not currently engaged in our local, regional or national societies. Perhaps those individuals have not seen the benefit of involvement, or perhaps they have not felt an inclusive invitation from one of us. Why is it important for us to reach out to them now? Why is it important for them to become involved? It is important because we are strongest united, and as we view the current political landscape we see other allied health fields showing their strength — in moves toward licensure—licensure, which on numerous occasions has contained wording inclusive of our neurodiagnostic professional practices. We are at risk of losing our professional identity and scope of practice if we do not unite to take action in the months and years to come. Many of you have already taken the initiative to move toward this goal in your own states. If you are willing to take up this challenge nationally by becoming a part of our Grassroots Campaign Census Taskforce and helping us discover our true strength by reaching out to and identifying with all of the members of your profession in your state, please email me directly at losburn@clarian.org to let me know. The Census Taskforce will literally be trying to identify and personally contact each person in every state who is practicing in our field. Your help in this effort is greatly needed and appreciated.

I am also carrying this challenge to all of us as leaders and future leaders of ASET. I am challenging us to include other stakeholder member societies as we seek to strengthen our own professional identity and to maximize our contributions to patient care. I am calling upon us to respect different perspectives and build upon the strengths of diversity that each professional identity and scope of practice if we do not unite to take action in the months and years to come. Many of you have already taken the initiative to move toward this goal in your own states. If you are willing to take up this challenge nationally by becoming a part of our Grassroots Campaign Census Taskforce and helping us discover our true strength by reaching out to and identifying with all of the members of your profession in your state, please email me directly at losburn@clarian.org to let me know. The Census Taskforce will literally be trying to identify and personally contact each person in every state who is practicing in our field. Your help in this effort is greatly needed and appreciated.

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Our challenge in seeking collaborative opportunities with these other societies is to establish inclusion while maintaining autonomy. Our rewards in these efforts will be in shared triumphs; triumphs of educational offerings, triumphs in collaborative research and triumphs in improving the overall quality of care our patients receive by achieving a more cohesive, productive workforce in the field of neuroscience.

In the spirit of inclusion, I invite each of you to join us as we reach toward a new era of collaboration and growth in the professional world of neurophysiology.

Happy Holidays to All!
Leisha Osburn, MS, R. EEG/EP T., CNIM, CLTM, DABNM
ASET President
Are you ready to share your experience and expertise? Here’s your chance to help lead the Society dedicated to advancing and promoting the Electroneurodiagnostic profession.

ASET is currently seeking END technologists who hold an Active membership in the Society to serve in leadership positions on its Board of Trustees. Nominations are being sought to fill three Trustee positions.

The Benefits Package
- A direct role in advancing the END profession
- Exposure to a wealth of personal and professional contacts
- Input on the future direction and programming of your Society
- Opportunity to exchange ideas and perspectives with other volunteer leaders

Applications due by February 15, 2010

Qualifications
- Strong background in committee and volunteer work
- Must be actively engaged in the practice [clinical, research, management or education] of electroneurodiagnostics or neurophysiology for at least six months preceding installation of office
- Demonstrated commitment to ASET and the profession
- For Trustee eligibility must be an Active member in good standing who has maintained membership for three out of the five years immediately preceding the election, the last two of which were as an Active member.
- At the time of installation and during term of office, no trustee shall serve on any other healthcare board at the national level. (This restriction does not apply to service on boards of national public charities or private foundations in the healthcare field.)

We want to hear from you. You don’t need to be nominated by another member. If you are interested in serving or know of potential board members - or to request a Board Profile Form - please contact Arlen Reimnitz, Executive Director, at arlen@aset.org or 816.931.1120.
ASET Board Adopts Disaster Recovery Program

By Arlen Reimnitz

At its August 2008 meeting in New Orleans, LA, four representatives from the Greater New Orleans END Association (GNOEAA) addressed the ASET Board of Trustees. They related their personal stories of living through Hurricane Katrina and her aftermath.

The stories each individual relayed were tragic and horrific. One told how his hospital fell into complete disarray soon after the storm hit. When the flooding started, all staff evacuated to the second floor. Doctors were carrying guns. Medical supply trucks were turned away by looters and gun fire. By the third day after the storm hit, the hospital lost air conditioning and food was in limited supply. On the seventh day the National Guard arrived but could only land in the parking lot next to the hospital. Patients were transported to the helicopters in pickup trucks. By September 10, the hospital was shut down completely, employees were escorted out, and the facility was taken over by the National Guard. The parking lot became a heavy equipment zone. After eight weeks, employees started picketing to force the army out so they could get back to work. In January 2006, the hospital reopened in limited capacity. All supplies had to be thrown out as everything was contaminated.

One told of being trapped on the roof top of her sister’s two story home for three days before being lifted out by a National Guard helicopter and dropped off briefly at a shelter. Another helicopter took her from the shelter and dropped her off on a muddy bridge, where she had to wait along with a number of others for buses to arrive. The buses took her to a third shelter crammed with people, where she was able to stay for a week. From there she was moved to a shelter in Arkansas. Eventually, she received a telephone call from her employer asking her to return to work in New Orleans. She had lost everything in the flooding caused by the hurricane, including her oldest brother, and has been staying in a dormitory since her return to the crescent city.

One worked at the Methodist Hospital in New Orleans for 23 years. The hospital never reopened after the hurricane hit. She is working as a contractor now along with having four other jobs.

In addition to relating their stories, the technologists provided valuable insight as to what ASET should do to be of assistance to END technologists when future disasters happen. They noted that when such a disaster hits, you don’t know if you are going to live or die, if you will have a home, where your family is, or if you will have a job. It would be desirable to be able to turn to an organization like ASET for stability and as a starting point.

At that same August meeting, the Board of Trustees voted unanimously to create a task force charged with developing a disaster assistance plan that would incorporate the suggestions and recommendations relayed by the END technologists. Cherie Young, R. EEG T., CNIM, from Metarie, LA, and one of the GNOEAA representatives at the board meeting, was appointed to chair the task force. Riki Rager, R. EEG T., Janet James, R. EEG T., R.N.C.S.T., and Gail Hayden, R. EEG/EP T., CNIM, RSPGT, served as task force members. In November 2009, the task force submitted its proposed disaster recovery program to the Board of Trustees for review and consideration. At its December 2, 2009 conference call, the board unanimously approved for implementation the ASET Disaster Recovery Program for Members as outlined below.

Purpose and Objectives:

The purpose of the ASET disaster recovery program is to provide a platform and clearinghouse for members to help fellow members who have been adversely affected by a disaster. Under the program, affected members can readily communicate their needs to the membership at large and access contact information for members and industry suppliers who have goods and services to donate or lend in the event of a disaster.

Members who wish to donate money to help colleagues in need are encouraged to give to the national or local chapter of the American Red Cross, or the legitimate charities and fundraising drives established for the disaster recovery.

What constitutes a disaster?

Disasters can be sudden, unexpected and unwanted occurrences that can not be avoided. Occurrences caused by nature such as floods, fires, tornados, hurricanes, earthquakes and storms – or caused by man such as airline crashes, terrorist attacks, and civil disturbances – that result in a U.S. state governor or the U.S. President issuing an official disaster declaration for a geographic area constitute a disaster under this recovery plan.

What constitutes a member being affected by a disaster?

A declared disaster area with damage that alters the function of a member’s primary place of employment, thereby causing the member loss of that employment for a period of at least four weeks, and/or a declared disaster area with damage that forces a...
ASET Board Adopts Disaster Recovery Program
Continued from Page 5

member to leave his/her primary residence for a period of at least four weeks, constitutes a member being affected by a disaster and eligible for assistance under this recovery plan. For purposes of this program, a member’s primary place of employment is defined as that at which at least 50 percent of his/her annual wages are earned.

Recovery Plan Assistance
When a member in good standing has been affected by a disaster, he/she is eligible to:

- Post messages on one or more of the electronic forums created to support this program.
- Obtain from ASET upon request to the Executive Office a letter confirming one’s membership in good standing in the Society.
- Apply – using the application available upon request from ASET – for a waiver of dues for the member year immediately following the year in which the member was affected by a disaster. All applications for dues waivers under this program are subject to review and approval of the ASET Board of Trustees.

Members in need of replacement documentation of their registry(ies) will need to contact the applicable registration board. If a member has lost his/her ABRET certificate(s) due to a disaster, the ABRET office will provide a free replacement upon request.

Disaster Alerts
Members are encouraged to contact the ASET Executive Office by telephone or e-mail when an occurrence constituting a disaster under this program has taken place as the Executive Office does not have a program in place to regularly scan and monitor natural or manmade disasters.

When an occurrence has been identified that constitutes a disaster under this plan, a disaster alert will be posted on the ASET website landing page – and a broadcast e-mail will be sent to the membership – directing members to the applicable disaster assistance/recovery forums.

Electronic Forums*
Members affected by a disaster under this plan – and members who are in a position to help said members so affected – are encouraged to make use of any or all of the following four electronic forums set up for that disaster. (In the event more than one disaster has occurred at the same time, a set of the electronic forums will be activated for each disaster.)

1. Contact Forum – While texting and e-mailing are likely the most ready forms of communication after a disaster has happened, it is entirely possible that telephone and cell phone service may be knocked out or otherwise disrupted. The purpose of this forum is for members affected by the disaster to let friends, families, and colleagues know that they are “okay,” to identify their immediate needs, and to convey how they can best be contacted. This forum is also for friends, family members, and colleagues to post communiqués until other communication lines have been restored.

2. Housing Forum – The purpose of this forum is two-fold: (1) members who have been displaced from their homes due to the disaster are encouraged to post their need for temporary housing. The posting should include the number, age, and gender of the people in the party in need of housing; if pets are involved; how best to be contacted; and (2) members who have a room(s) that they can provide to temporarily house displaced members are encouraged to post the availability.

3. Supply Forum – Since supplies will be contaminated in many disaster situations, the purpose of this forum is for members affected by a disaster to post their need for temporary equipment and supplies to support the workplace. A listing of vendors who have committed to provide assistance in the event of a disaster will be accessible from this forum. Vendors are encouraged to scan this forum when a disaster has occurred and proactively offer assistance.

4. Employment Forum – The purpose of this forum is two-fold: (1) members who are expecting to be displaced from their jobs for longer than 30-days as the result of a disaster are encouraged to post their need for temporary (or permanent) employment. The posting should include a brief description of work experience, education background, credentials held, whether they are willing or able to relocate, and how they may be contacted. (As a standing and ongoing member benefit, members are reminded that they may post their resumes and search for job openings on the Employment Exchange section of the ASET website for free); (2) employers who may be able to offer temporary (or permanent) part-time or full-time employment to displaced members are encouraged to browse this forum and follow up accordingly with the displaced members, and/or post a brief job vacancy announcement.

* So that members and vendors can readily participate in the disaster response forums, it is desirable that the forums be accessible without requiring ASET member log-in. If it is not feasible to build the forums on the public side of the ASET website, the forums will be available on the official ASET Facebook page, which is currently under construction.

When the electronic forums become available, announcements will be made in broadcast e-mails to the membership and posted on the ASET Website so that vendors and members can proactively post on the supply forum resources that can be made available when a disaster hits.●
Get Published in AJET

Authors needed. Topics welcomed. Getting an article published in the American Journal of Electroneurodiagnostic Technology (AJET) can be your next professional accomplishment/resume builder. Lucy Sullivan, ASET’s Director of Publications, is ready to help you become a published author. Talk to your electroencephalographer. He/she may want to join you as a co-author.

AJET’s publication categories include:

- Review article – comprehensive, critical review of the literature and a state-of-the-art summary of a pertinent topic that has been the subject of at least 40 published research articles.
- Technique article – “Technical Tips” feature article that describes a new technique or explains a well-established technique. Technical Tips articles may express personal opinions.

All AJET articles are subject to peer review by the Managing Editor, the Medical Editor, and three anonymous reviewers selected by the Managing Editor.

The Editorial Committee welcomes your input about what topics you would like to read about in AJET. Some of the current topics we are looking for authors for are:

- Cerebral microdialysis
- Epilepsy in the elderly
- Neuroradiology procedures – PET and SPECT
- Gamma
- Sleep patterns in ICU patients
- Specifics of TIVA

Please contact Lucy Sullivan at lucy@aset.org or 417-253-5838 with any questions or suggestions related to AJET.

ASET Membership 101

Did You Know You Can Shop at iGive.com and Donate to the ASET Foundation?

If you are preparing for the holidays or do much of your shopping on-line, go to www.iGive.com, and register, indicating ASET Foundation as your charity. It’s private, secure and an easy way to give to this important organization. With your first purchase via iGive.com, $5 will be donated to the Foundation. There are currently 716 stores participating in iGive, each time you make a purchase through a participating store online a certain percentage, ranging from 26% to 0.4% of your purchase will be donated back to the ASET Foundation. To date, $435.74 has been donated to the ASET Foundation from iGive.com shoppers! This is almost enough to fund one full ASET Annual Conference Scholarship.

HOW IT WORKS

Step 1 - Shop through iGive.com
Start your shopping at iGive.com: use the links in their online mall, their newsletter emails, or the iGive.com Shopping Window reminder tool. These are the only ways to get credit (donations) for your purchases! If you don’t shop through iGive.com, they will not be able to credit the donation to ASET Foundation.

Step 2 - Sit back and relax
(Purchases are tracked automatically!)

Please allow 30 days (after the shipment date) for your purchase and resulting donation to be credited to your cause. For travel/lodging, please allow 30 days after the travel date.

Donations are credited automatically for 99% of iGive’s participating merchants.

Hint: Bookmark your iGive.com Shopping Report page. This is where your credited donations will be listed.

Step 3 - iGive Mails the Donation Check to ASET Foundation
Donation checks are mailed every month, for funds calculated 75 days in arrears. The minimum for check issuance is $25 - if the Foundation has not reached the $25 minimum, their funds will roll over to the following month.

Hint: Bookmark your Cause Stats page to learn how much ASET Foundation has risen through iGive.com, view a list of donation checks sent to your cause, and see the estimated amount of their next donation check.

You can also Download the new iGive toolbar for easy searchability and better ways to track your donations.
Statistical Membership Data for ASET
WHO ARE OUR MEMBERS?

Membership

- **Active**: 2,495
- **Associate**: 63
- **Student**: 187
- **Institutional**: 607
- **Lifetime/Honorary**: 28

**Membership**: 3,380 [as of 11/12/09]

**Subscription Type**
- Individual Subscribers: 29
- Library Subscribers: 125

Subscribers: 154

**Education**

- **Associate’s**: 281
- **Bachelor’s**: 635
- **Master’s**: 77
- **MD**: 72
- **PhD**: 53

**Education**

- **2 year Associates Degree**: 281
- **Bachelors Degree**: 635
- **Master’s Degree**: 77
- **MD**: 72
- **PhD**: 53

**Credentials**

- **R. EEG T.**: 1,272
- **R. EP T.**: 421
- **CNIM**: 681
- **CLTM**: 40
- **R.NCS.T.**: 202
- **RPSGT**: 266

**Age**

- **20-29**: 413
- **30-39**: 533
- **40-49**: 552
- **50-59**: 390
- **60+**: 90

**Geographical**

- **1,374 ASET members West of the Mississippi River**
- **2,024 ASET members East of the Mississippi River**

**Outside of US**: 136

**END Specialty Areas**

Top END Specialty Areas of Interest
ASET members’ top 10 specialty areas of interest in END (as indicated on membership application)

- **EEG**: 1,241
- **SSEP**: 719
- **BAEP**: 670
- **VEP**: 666
- **IOM/EP**: 605
- **IOM/EGG**: 564
- **IOM/EMG**: 509
- **Ambulatory EEG**: 484
- **Pediatrics**: 437
- **NCS**: 412
Congratulations to Our New Members [Since 09.22.09]

Institutional Members
Banner Baywood Medical Center
Brigham and Women’s Hospital
Canadian Association of Electroneurophysiologists and Technologists, Inc.
Capital Health
Centerpoint Medical Center
Definitive NeuroDiagnostics
Driscoll Childrens Hospital
Hamot Medical Center
Insight NeuralMonitoring, Inc.
Miami Children’s Hospital – Brain Institute
Myelin Inc.
Northwestern Memorial Hospital
Phoebe Putney Memorial Hospital
Saxon Medical Group
Seton Family of Hospitals
Temple Neurmonitoring
University of Utah Comprehensive Epilepsy/EEG Department
USC University Hospital
Wallace State Community College
West Virginia University Hospitals

Individual Members
Meghan Andrews, BA
Sherif Antar, R.NCS.T., BS
Ruben Aquino, CNIM
Brittain Askew, R. EEG T.
John Atwater, BA, MD
Dayton Bailey, CMA, BS
Angeles Barba, MBA
Marcus Barnes, CNIM, BS
Patrick Bartlett, R. EEG T.
Jeffrey Bastar, CNIM, BS
Mekit Berhe
Tykeshia Bibbins
Kristol Biesecker, BA
Lavita Blake, R. EEG T.
Beth Blanc, BA
Kailie Blankenship, BS
Tara Bobo
Jodi Boothe, R. EP T., R.NCS.T., RPSGT

Continued on page 10 ▶
2009 Kathy Mears Special Award

The Kathy Mears Special Lecture makes it possible for us to bring a highly respected END Technologist to give a presentation during the Annual Conference General Session. But do you know that we also have a Kathy Mears Special Award? Many of you know that Kathy was a past-president of ASET and ABRET, and was also an enthusiastic mentor and educator for END technologists. In memory of her dedication to educational endeavors in our field, this award supports END Programs and outstanding students.

END Technology programs that are accredited by CAAHEP are eligible to apply for this award, which provides $500 to the recipient selected by the K. Mears Award Committee. The award is divided, and a $300 scholarship goes to the student who is nominated by the Program Director. The student selection is based on academic achievement and leadership and volunteerism efforts, with a lesser emphasis on financial need. The remaining $200 is awarded to the END School to fund the purchase of an item that will contribute to the success of the Program and benefit the students and faculty.

We are pleased to announce that this year’s Kathy Mears Special Award will go to the Mayo Clinic END Technology Program in Rochester, MN. The student nominated to participate in this award is Deedra Gillis. Congratulations to Deedra and her Program Director, Jan Buss, R.NCS.T. Jan describes Deedra as an outstanding student, who is always ready to help other students, stay late at her clinical sites, for EEG reading sessions and “She is a wife, mom, full-time student and works a part-time job and through all of this has perfect attendance.”

Jan plans to use the $200 award to the END Program to fund an upgrade for the Program’s page on the School of Health Sciences website. This will enable students to view schedules, policies, quizzes and other helpful information on the program’s web page.

As always, all of the applications we received were outstanding, and it was difficult for the selection committee to choose this year’s recipient. Thanks to the committee members and to Fran Pedelty, R.EEG.T., for serving as Chair of this committee and for a job well done.

Congratulations to Our New Members

Continued from Page 9

Michael Shaddock
Nadiv Shadlov, AA
Leslie Shafer
Evgeny Shelkov, CNIM, BS
Jessica Shroyer, CNIM, BS
Brad Shults, BS
Irina Simakova, MA
Ram Sindhu, PhD
Kim Skanes, RET, RT
William Slavensky, R. EP T.
Tracey Smith
Jon Snyder, AS
Christine Sobotka
Andrew Sofranko
Stephanie Sormer
Linnea Sommier, BA
Starr Sorhaindo
Vera Spraggins
Ashley Stack
Cindy Stewart, AA, MA
Cheryl Suchan, CNIM, CRNT
Sean Thompson, CNIM, R.NCS.T, MBA
Qiusheng Tong, CNIM, BS, PhD
Valerie Tonwe
Su Tun, BS, MS
Vanessa Tyler, R. EEG/EP T, BA

ASET Foundation Donors

The ASET Foundation gratefully acknowledges donors who have made contributions since September 2009. Thank you for your continued support of ASET and the ASET Foundation.

Becky Appenzeller
Kevin Ballinger
David Belanger
Nancy Eber
Michele Galganski-Cleanthous
Marisha Hamid
Margaret Hawkins
Miguel Maranan
Linda Philpott, PhD
Margaret Reveler
Charlene St. Laurent
William Sutherling, MD
Qiusheng Tong
Jaquita Warmock

Michele Varallo, R. EEG/EP T., RPSGT
Jenny Vu
Janet Wilde, BS
Roger Willette, MD
Dale Wyeth, R. EEG T, MA
Edmund Wyeth, R. EEG T.
ASET’s New Learning Portal

ASET has been moving the online courses to a new learning portal that will allow for many new and improved features. If you are an online student, you will notice when the change occurs that the portal will appear differently and while the content is the same with a few updates, the material is now in a downloadable form rather than web pages. This will make the content more portable.

The new learning portal web address is: http://aset-edu.org

Visit the site and view a short video with instructions for participation in ASET Webinars, and also download a PDF with instructions for downloading movie files and adapting them for use on a personal device such as an iPhone or iPod Video. The PDF and short webinar instructional video are available just below the “Welcome” at the top of the ASET Learning Portal home page. Any new instructional materials will be available in this section in the future, so if you are curious about ASET online education, you can visit the portal and access instructional and informational materials at any time.

Once the new portal is open, there will be a single sign on for the ASET website that will include online education access. You will no longer have to remember two separate usernames and passwords to access your online courses, and the member features of the ASET website. There will also soon be an automated system that will add your online course credits to your ACE roster on the ASET website. This will simplify matters for those who currently have credits in the online course portal and then also from seated seminars and conferences on the ASET ACE roster. Combining these credit records will make life simpler for participants.

Online education is constantly evolving and ASET has made the commitment to keep up with current trends that make continuing education easy to access and affordable for everyone in the field of Neurodiagnostics. We hope you will visit the new learning portal soon and see the new features. There is a calendar of upcoming events, list of courses by category, and with additional information by clicking the category or scrolling down to the list of courses.

Mark Twain must have used this philosophy when he was writing all of those classic novels. Most of us have had times at work when the tasks seem overwhelming, and the only way to get through the day is to do your best at each small task. Since this is December, I have an image of Santa’s workshop in my mind, with all of the elves busily building the toys for Santa to deliver on Christmas Eve. We at ASET have a sort of workshop going on behind the scenes, all year ‘round! It is not elves who do the work, but members of our committees and task forces, our staff and volunteers, and they each strive to deliver the best that they can for ASET members!

As I thought about what I wanted to share with you in this newsletter, I went over all of the tasks we are planning to complete in the upcoming year. Our goal is to create tools to help ASET members to make their work lives better. Here is a list of what is currently under production in the “ASET Workshop”.

■ 2010 ASET Seminar Courses:
  March 19 & 20, 2010, Philadelphia, PA:
  • Comprehensive EEG Review Course
  • Nerve Conduction Workshop Course
  October 22 & 23, 2010, Ann Arbor, MI:
  • Comprehensive EEG Review Course
  • LTM and ICU Monitoring

■ 51st Annual Conference:
  August 4-7, 2010, Louisville, KY
  Course Tracks:
  Day 1: Evoked Potentials  Day 2: Professional Development
  NCS Key Topics  EEG Key Topics
  ICU Monitoring  LTM/Epilepsy
  IONM Key Topics  Advanced IONM

■ Extended Webinar: Fundamentals of IONM
  May 13 & 14, 2010
  • Lectures will be ideal for anyone planning to take the CNIM exam!

■ Revised Scope of Practice for END Technology
  Updated to reflect our expanding roles.

■ Job Descriptions for all END Modalities

■ Comprehensive Policy and Procedure Manual
  This will include samples from all END Modalities and areas of practice

Continued on page 12
that registration process, you enter information about the way that you practice IONM and then you enter contact information. The contact information cannot be seen by any of the investigators and can only be seen by a third party who cannot see any of the patient data. This third party can be contacted by the investigators to verify data integrity with the person who entered the data. No patient data should ever be given to any representative of the NREC by email or by voice, only by entry onto the secure database. The investigators will regularly check the database for problems and completeness.

As part of the registration questionnaire, you must acknowledge that you have read and understand the information in this document.

Is the Data I Enter Secure?

Protecting patient information and preventing information about specific hospitals and practitioners from being inadvertently released is of vital importance to the NREC process.

The NREC data collection process has been approved by the University of Texas at Dallas Institutional Review Board and great care has been taken to minimize the possibility of releasing any identified confidential patient information. First, the site is accessible only through a secure, encrypted, hypertext transfer protocol (“https”) that is commonly used when critical personal information such as credit card information is entered in order to prevent inadvertently revealing the information sent to the website. Second the NREC web site and the NREC have undergone extensive evaluations by Digicert to obtain the extended validation certificate that turns the address bar green when connecting to the NREC site as an additional indication of security. Always make sure that you do see the address bar turn green prior to entering any data.

Third, the only patient identifier entered is a code number known only to the data collector. The investigators cannot see this identifier and as an additional level of security, the investigators cannot see or access either the name of the person who collected and entered the data, or any of their contact information. A third party who is not one of the investigators can access the contact information and the patient identifier but cannot access any of the patient data. This third party, called the “honest broker,” may be contacted by the investigators when they note that data is incomplete or inconsistent so they can request that the data collector update or check information related to a patient associated with a given identifier. Thus, neither the investigators nor the third party can access identified patient information. It is important to be aware of the fact that although the data collector may be contacted by the “honest broker” if the investigators note a problem with the entered data, the NREC will never contact the data collector to obtain any information about a patient over the phone or by email. Data collectors must not communicate patient information to the NREC except through the website.

When data from the NREC database are reported in publications, no specific information regarding the identity, affiliation, or location of the collector will be mentioned. However, data may be segregated by broad categories such as the experience, training and credentials of the data collector.

What If I Have Questions?

Please feel free to contact Mark Stecker (mmstecker@gmail.com).
Mark your calendar for the 2010 Annual Conference in Louisville, Kentucky, August 4-7, 2010! ASET will help you set the pace to stay ahead in new trends in ENDF Technology! Our 2010 Program will include “blue ribbon” speakers in our General Session. Our Special Lecture topics and presenters are being selected right now, so please watch for broadcast e-mails and website updates to see what we have in store for you. Our annual course tracks will include: two days of IONM topics, EEG Key Topics, NCS Key Topics, LTM/Epilepsy, Professional Development, and a day devoted to ICU Monitoring. We will also offer a great selection of Sundown Seminars, opportunities to network, and see the newest equipment and supplies in the Exhibit Hall.

There are so many major medical centers in commuting distance of the Louisville Convention Center, from which we will recruit expert faculty! Lecturers will be coming from Cleveland, Cincinnati, Indianapolis, Nashville, and Lexington and Louisville, KY!

If you have never experienced the City of Louisville, you are in for a treat. This is a genteel city, on the shore of the Ohio River, where you will find a picturesque waterfront park to enjoy. Our meeting will be in a modern and spacious convention center, connected to our designated hotel. You will find a wonderful variety of restaurants, theater and shopping venues a few minutes walk from the hotel. You can catch a ballgame at Slugger Field, take a steamboat ride, or go on a tour of Bourbon distilleries or the Historic Victorian District. You can visit the home of the Kentucky Derby, and drive through the beautiful Blue Grass country while in the area. Please join us for the 51st ASET Annual Conference!

Scholarships Available
ASET members: Don’t forget full registration scholarships are available! Go to www.aset.org and click on the Foundation tab to download the scholarship application. The scholarship deadline for the ASET Annual Conference is May 4, 2010.
2010 Call for Papers and Posters

Consider sharing your knowledge and experience with your fellow END Technologists during the General Session at the 2010 ASET Annual Conference. Put together an interesting case presentation, procedural update, interesting experience or even your research results. This is a great opportunity to expand your professional experience, develop presentation skills and network with other professionals in the field.

Benefits of Presenting:

• Complimentary meeting registration for the day of your presentation
• ACE Credits awarded to those that present
• Abstract will be published in the American Journal of Electroneurodiagnostic Technology (AJET)

Two ways to Submit:

1. Complete the form electronically online at www.aset.org/abstractonlineform and copy and paste, or email Faye McNall, ASET Director of Education, your abstract at fmcnall1@roadrunner.com.
2. Download the form at www.aset.org/abstractform and fax or mail to Faye McNall, ASET Director of Education. Then email your abstract to fmcnall1@roadrunner.com.

Deadline: March 15, 2010

For tips on writing a presentation abstract or preparing a poster, click here.

For specific questions and information contact:
Faye McNall, R. EEG T., MEd
PO Box 36
East Boothbay, ME 04544
207.350.4087 phone
877.207.2235 fax

Hotel Information:

A room block has been set aside at the Louisville Marriott Downtown, 240 West Jefferson St, Louisville, KY 40202. To make hotel reservations, call 502.627.5045 and indicate you are attending the ASET Annual Conference. For more information on the hotel and its surroundings click here.

The Louisville Marriott Downtown is the premier convention hotel and provides a Pedway connection to the Kentucky International Convention Center where our meeting will be held, and to Louisville’s bustling new Fourth Street Live district. The hotel is also just steps from Waterfront Park, Louisville Slugger Museum, Louisville Glassworks and the Muhammad Ali Center — and just minutes from Churchill Downs, home of the Kentucky Derby.
ELECTRODE NOMENCLATURE

By: Lucy Sullivan, R. EEG T., CLTM

Nomenclature – a system for naming things, especially in a particular area of science. *Cambridge International Dictionary of English*

The American Clinical Neurophysiology Society (ACNS) has proposed a “slight modification” to the International 10-20 System of electrode application. *Guideline 5: Guidelines for Standard Electrode Position Nomenclature* describes the modifications and the 10-10 System (Figure 1).

You can see the traditional 10-20 System electrodes amongst numerous additional electrodes. The additional electrodes are placed halfway between the traditional 10-20 System electrodes.

The darken electrode positions – T7, P7, T8, and P8 – are the new nomenclature. There are no changes in the way the patient’s scalp is measured. The electrode positions have simply been renamed.

T7 replaces T3
P7 replaces T5
T8 replaces T4
P8 replaces T6

Now all the electrodes along each sagittal line have the same postscripted number and all electrodes along each coronal plane have the same letter.

So when you see an EEG sample (Figure 2) at a meeting or seminar or on a board exam, with T7, P7, T8, and P8, you will know exactly where these electrodes are placed.

In epilepsy monitoring units, FT9 and FT10 are often added to record from the tip of the temporal lobe. FT9 is placed 10% inferior to FT7 (an electrode position that is halfway between F7 and T7). FT10 is placed 10% inferior to FT8 (an electrode position that is halfway between F8 and T8). All of the “9” electrodes in Figure 1 are placed 10% inferior to the “7” electrodes. All of the “10” electrodes in Figure 1 are placed 10% inferior to the “8” electrodes.
Welcome from the Interest Section Coordinator  
By Margaret Hawkins, R. EEG/EP T., CNIM

In keeping with the Holiday Spirit, I asked our Special Interest people to give you all some little presents of wisdom, practical tips, tricks-of-the-trade, and/or insight into difficult problems. They have years and years of experience and they delightfully came up with an armload of ideas. I was struck by a common theme in several of the articles—that is the idea of “Paying it back” or “forward”...that notion of receiving and then giving it all away and receiving it back again. That’s really what this feature of the ASET news is all about, and I hope that each of you will make an effort to do likewise as you go through the special next few weeks and that you enter the New Year with more of the same. Happy Holidays!!

Acute/Critical Care End  
By Anita Schneider, R. EEG/EP T., CNIM

Significant cEEG findings in patients with sepsis in the “medical” ICU

It is a well-published fact that there is a high incidence of nonconvulsive seizures (NCS) and non-convulsive status epilepticus (NCSE) in the neuro ICU. These findings are often present in patients with epilepsy, trauma, ischemia, hemorrhage, and encephalopathy.

A recent retrospective study from Columbia University identifies an additional patient population at risk. This study was published in Critical Care Medicine 2009 Jun; 37(6):2051-56 by Oddo M, Carrera E, Claassen J, Mayer SA, Hirsch LJ. This retrospective study examined predictors and prognostic value of electrographic seizures (ESZs) and periodic epileptiform discharges (PEDs) in medical intensive care units (MICU) patients without a primary acute neurologic condition. 201 consecutive patients admitted to the MICU between July 2004 and January 2007 without known acute neurologic injury underwent continuous EEG monitoring (cEEG) for investigation of possible seizures or changes in mental status. The majority of the patients (60%) had sepsis as the primary admission diagnosis and 48% were comatose at the time of cEEG.

Ten percent (n=212) of patients had ESZs, 17% (n=34) had PEDs, 5% (n=10) had both, and 22% (n=45) had either ESZs or PEDs. Seizures during cEEG were purely electrographic (no detectable clinical correlate) in the majority (67%) of the patients. Patients with sepsis had a higher rate of ESZs or PEDs than those without sepsis (32% vs. 9%). On multivariable analysis, sepsis at ICU admission was the only significant predictor of ESZs or PEDs.

CONCLUSION: In this retrospective study of MICU patients monitored with cEEG, ESZs and PEDs were frequent, predominantly in patients with sepsis. Seizures were mainly nonconvulsive. Both seizures and periodic discharges were associated with poor outcome. The authors suggest prospective studies are warranted to determine more precisely the frequency and clinical impact of nonconvulsive seizures and periodic discharges, particularly in septic patients.

Ambulatory Monitoring  
By Jennifer Carlile, R. EEG T.

“Little gifts” of our expertise, “pearls of wisdom,” and “fantastic little techniques” to make an everyday job easier: the removal of glue, paste, and anything sticky on the electrodes. Prior to disinfecting the electrodes submerge the dirty electrodes in the hottest water possible with a scoop of powder dishwasher detergent (i.e. Cascade, Electro sol, etc.) Let them soak for 10 to 15 minutes; all of the “gunk” will be off without any damage to the electrode wire, hub or electrode cup. This also works great for dishes, don’t scrub or scour your pots and pans, use the described method above, and save your hands for other tasks. The trick is using very hot water and letting it soak for at least 15 minutes. Happy cooking, cleaning and enjoy the Holidays!

A follow up on a previous article written for the September 2009 ASET news: it is so important to ask your doctors for repeat studies on their patients that have newly diagnoses of seizures/epilepsy or have just been placed on medication to control their “events.” Read on for the number one reason.

Patient presented with a diagnosis of Alzheimer’s disease, went for a second opinion, and the initial 48-hour ambulatory EEG (AEEG) documented seizure activity. The patient was placed on antiepileptic

Continued on page 17 ▶
Ambulatory Monitoring... Continued from Page 16

mediation, she reported that she was doing much better, and had no events of memory dysfunction. After one year, a follow up visit to her neurologist, the patient appeared slightly confused and said that her “memory isn’t what it used to be.” The neurologist remembered being urged by a registered technologist to repeat AEEGs, especially on those with newly diagnosis’ of seizures/epilepsy or have just been placed on medication to control their “events.” Interictally, the patient had recurrent right paracental sharp waves (Figure 1).

FIG. 1. Right paracental sharp waves seen interictally.

The patient had 5 nocturnal seizures consisting of right paracentral 2 to 3 Hz high voltage slowing, which spread to the right temporal region and lasting for one minute (Figures 2, 3, 4, 5, 6, and 7). The patient had no idea that she was still having seizures while she slept.

FIG. 2. Onset of seizure with right paracentral 2 to 3 hertz delta.

FIG. 3. Seizure continues with right paracentral 2 to 3 Hz delta.

Continued on page 18

Interest section leaders are a resource to members. Please feel free to contact leaders with questions, problems, suggestions or feedback of any kind. It is the policy of ASET that interest section leaders not promote their services or products through their role within the organization. To prevent misunderstandings, especially for those leaders that must “change hats” when receiving calls at work, please initiate all calls by identifying yourself as calling in regard to ASET’s Interest Section.
FIG. 4. Seizure continues with right paracentral 2 to 3 Hz delta.

FIG. 5. Seizure continues with right paracentral delta.

FIG. 6. Seizure continues with the right paracentral delta decreasing in frequency and in amplitude.

FIG. 7. Seizure ending.

After you see the final report from the physician on the original AEEG, if they detected seizures or started new medication to stop events, why not follow up with asking for a repeat study in a few months or like in my case in one year? Worse is that the physician says no. Then you can come back with hey...look at this great example. I love what I do, for this exact reason. I am making a huge difference in this patient’s life! Looking at it from that perspective shines a new light on things...

COMPUTERS IN THE WORKPLACE

By Brian Markley, R. EEG/EP T., R.NCS.T., BS

This month we have been asked to share some tips as a holiday “gift” to our interest section. I will endeavor to share a few things I have learned about dealing with underperforming computers. In the part of my job that involves IT support, I have spent more time working on this issue than almost any other. Some of the things you can do to improve your computers performance are very simple.

Part of system performance is the amount of memory available to run programs, nothing new to many of you. It has been true for many years that increasing memory gives the most “bang for the buck” in performance improvement. If your system is not at its maximum capacity you might want to consider adding more. The maximum supported memory is 4 GB for a Windows XP computer. No offense intended to the Mac users out there… I actually have an iBook. We’ll have an article about Macs sometime.

One of the most important things you can do to keep a computer running is to avoid malware (viruses and spyware). On corporate or hospital networks the anti-malware software is generally managed centrally. On your personal computer you want to be sure you have purchased and installed the appropriate software.

The next area to look at is the hard disk. One of the programs that comes standard with Windows is called Disk Cleanup. It is in the System Tools section of the Accessories program group. This program’s function is to remove files no longer needed by the computer. A buildup of these files can cause a computer to run more slowly. Another useful free Windows utility program is Disk Defragmenter. Defragmentation is a process of consolidating files on the computers disk. When the files are better organized, there is less time spent searching for and retrieving data from the hard disk drive. Disk Cleanup and Defrag are so useful that we schedule these to automatically run weekly on all our PCs.

There is another useful tool built into Windows that can help you with a slow moving computer. This is the Task Manager program. The easiest way to start this program is to press Control-Alt-Delete and then
**Computers in the Workplace**  
*Continued from Page 18*

Click on Task Manager. Once this program is open, at the bottom of the task manager window you will see a CPU usage percentage. This will fluctuate but generally stay low (< 40%) most of the time. It may jump up briefly but should soon return to the lower levels. It the CPU usage stays high, you can click the Processes tab and then click the CPU column to sort the currently running processes (that is programs) by CPU usage. The highest percentage should be System Idle Process. Other processes may briefly occupy the computer, but it should soon return to System Idle Process. It is risky to attempt to stop any process. It is often more useful to see what is hogging the processor. If you copy down the name (example: avgnsx.exe) and search Google on that name, you can find out what program the process is associated with. In the case of avgnsx.exe, the process was related to the antivirus program. We checked to make sure that the computer gave less priority to this process and the performance improved.

Next issue, I will continue on the issue of computer performance and talk about controlling what loads when you start your computer. As always, please pass on any comments, questions or suggestions to bam@neurologycenter.com.

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**CPT Coding**
*By Lynn Bragg, R. EEG/EP T.*

This time I could not come up with one idea on how to relate the suggested topic to CPT coding. So I decided to just write about the suggested topic.

I work in a private office of 16 neurologists, one of whom is a pediatric neurologist. The major concern of my patients is how they are going to look after an EEG. Some of them are headed to school, or work, or even to meet a friend for lunch. They are nervous they will look like someone scared them! I always try to make sure my patients are cleaned up, and ready to continue their day as if they never had an EEG. I know that that would be how I would expect to look after having one.

Often times, my patients have multiple tests ordered and for whatever reason may be scheduled on separate days for each test. When I catch this, I call my patients and ask them if they would like to have several tests on the same day to keep from having them make several trips to the office. They are very appreciative of this especially if it means they will not need to take several vacation days to get all of this done. I know that I would cram as many tests in one day as possible. My feeling is tomorrow I’ll be glad I did that today.

The bottom line is remember how you would feel if someone gave you a call to help out with combining testing or took several extra minutes to clean up your head or even take the few minutes necessary to check on a future appointment, answer a question, or just let them bend over to sort the currently running processes (that is program) by DEPARTMENT MANAGERS

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**Holiday Gifts**
*By Pat Lordeon, R. EEG T.*

As our assignment for this Newsletter, we were asked to share “pearls of wisdom” or techniques to make our jobs easier. I am sure that my co-contributors will have a plethora of gems to share with everyone, so I am going to take a slightly different course...

At this Holiday Season, I would like to share with you my observations over the years of how the wonderful folks I work with every day make things special for both their co-workers and their patients. For instance, the technologist who was asked to remove electrodes from an infant undergoing prolonged EEG monitoring. The infant was being withdrawn from life support, and the parents wanted a final portrait. The tech meticulously shampoowed and styled the infants hair, with tears in her eyes the entire time…and the tech herself was several months pregnant. She went the extra mile for that family, because she cared.

Caring for others is what we do. We should never be afraid to step outside the box and do a little extra. In a world full of HIPAA and legal issues, we are sometimes reluctant to extend our hand, offer that word of support or compassion, or let ourselves be vulnerable in front of others. But it makes a huge difference to the person on the receiving end.

One of our techs recently took a patient’s mother out to dinner, because the mother was having a difficult time coping with her child’s...
**Department Managers. Continued from Page 19**

hospitalization. This technologist has a casual, easy going style that makes the patients and families she meets feel special and protected. The tech recognized that the mother was lost in a world of medical jargon, and she desperately needed some “away time” to decompress and regroup. Our tech gave this mother an opportunity to step away from the hospital environment, and the mother returned refreshed and surprised that a stranger would be so kind to her.

As a group our department befriended, over an extended period of time, a patient who was undergoing chemo. The patient and his family became part of our family, and when he passed away we attended his funeral. To our surprise, in a slideshow of pictures shown at his memorial service, photos of our group with him were included. This was several years ago, and we still keep in touch with the family. We were not afraid to care about this family, and we were (and are) enriched by the bond we share with them.

When my husband passed away unexpectedly eight years ago, my son was ten years old. Christmas held no charm for him that year. The techs and nurses in my lab collected enough money for my son to buy his first two wheeled bicycle as a Christmas present from all of them. They have continued to watch over him, and he considers them to be a part of his family now. In fact, we joke that he was never able to get into trouble, because he had not one, but 12 moms (and a few big brothers?!) and it is something I see in the people I call my students.

The recurrent theme running through these stories is that of “caring.” Not just taking care of business, but really truly thinking of the patient as a whole person, not just a procedure. If we can remember to do that, no matter what else happens to that patient, that tech or that family, everyone gains the benefit of a positive interaction and a good experience. So extend yourself a little… and make the Holiday Season last all year long!

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**END Education**

*By Mary Feltman, R. EEG T., BS*

There are a few of us END techs that will take the time to help the patient through the test, to achieve a successful test for the patient, and for the interpreting neurologist. This is a great opportunity to share our tricks of the trade tips.

One group of these tests are for those patients with an order for an extended sleep deprived EEG. We know this group only too well... cranky without their caffeine and lack of sleep. To these people, I suggest coming in dressed in a sweat suit and/or the most comfortable clothes and either wearing or bringing along warm socks. Why, you ask? You sleep best when your feet are warm. Yes, these patients get a blanket, but this not the same. If these patients put on the socks and then cover with the blanket they do go to sleep. Now you are asking what difference is there if the patient has their shoes on or off. Do you sleep with your shoes on? This is just a little trick that I have found that helps to relax and comfort the patient to get some well needed sleep and I get the extended sleep recording.

The other group of patients that I have a trick for is the ICU portable patients. There are so many helpful tricks for this group. Regarding the history, I always include a list of all the equipment currently hooked up to the patient. During the test, I then attempt to document a recording from each piece of equipment. For example, the IV drips from the IVAC or the automatic blood pressure (BP) cuff inflation. I try to note something to prove any potential artifact from the piece of equipment. The other thing I include on all ICU patients is a current set of vital signs. This includes a current temperature, BP, pulse, and respiration rate. The sweat artifact might be proven by the elevated temp or the rocking occipitals correlate to the ventilator rate. A good double check by the verification of the EEG and recording devices goes a long way to a cleaner EEG.

These are so simple yet often neglected. Think about how you would like to be treated or your family member is treated. Just try to treat everyone like they are special, like a member of your family and you will have performed a successful EEG. You might even get a pat on the back for the study! Way to Go!!

*By Mark Ryland, R. EP T., RPSGT, R.NCST., AuD*

**Courage**

As an instructor I get to work with a new group of people every year. With every new class comes challenges, successes, heartbreaks, anxieties, and inspiration: occasionally all in the same day! As an instructor, I am sometimes viewed as a mentor, the one who dispenses all the knowledge, motivation, and inspiration. This makes sense because I know a bit more than the students and in most cases I’ve been there, done that.

But the one thing that always stands out to me and something I see every year in every class are individuals who are going out on a limb and taking a chance. What I see, and what inspires me is their courage. Courage is not blindly going into an unknown situation with no fear and no doubt that you are going to succeed, rather, courage is going into that unknown situation with fear and with doubt, but going in anyway because it is the right thing to do. That is the true measure of courage, and it is something I see in the people I call my students.

I recently completed my studies and obtained my doctorate. Part of the inspiration to begin that difficult process was the courage I saw in my END students who graduated in May 2008. I may have helped them learn a great deal of information which aided their success, but what I learned from them was far more than simply knowledge.

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**Epilepsy Monitoring**

*By Cheryl Plumrner, R. EEG T., CLTM, BS*

We were asked to share any professional “pearls” of information that we use frequently in our END careers. One of these golden rules that comes into play in all aspects of life, including our professional life, is to “treat others as we would like to be treated.” This is so important to us as care providers. We have to always consider how we would like ourselves or our family to be treated, and then give our patients and colleagues the same consideration. The other “jewel” that I think is a great idea, is to place the ground electrode on the forehead (perhaps in the Fpz position, if not being used as a recording electrode) or in the eye movement field. This can really help to identify if there is a problem with another electrode on the head. It is helpful because when an electrode is malfunctioning, the ground electrode fills in for the malfunctioning electrode. For example, if O1 is off the head, you should see eye movements coming from O1 because the ground (Fpz) is filling in for the open grid. Eye movements should not be seen in the back of the head (unless of course you are a parent!). This would tip off the tech to go and take care of that electrode.

Let me take this opportunity to wish all of you a happy, healthy holiday season and a peaceful and prosperous 2010.

*By Pat Trudeau, R. EEG T., CLTM*

Season Greetings to everyone. This month we were asked to share some “Pearls of wisdom.” I may not have any pearls but I would like to share some thoughts with you.

I recently had some health issues which caused me to have a hospital
Epilepsy Monitoring. Continued from Page 20

visit. I was amazed to hear some of the health care workers tell me how they had a similar problem but theirs was so much worse. I wanted to stop them and say I'M THE PATIENT.

This hospital visit made me realize how important it is to listen to our patients. I know we are all busy but take some extra time during the day to just chat with your patients; even if it is only a couple of minutes. Getting your patients some extra blankets or water goes a long way in achieving good rapport. Many patients have told me things that they have not told their physician. For example a patient told me “do not tell my doctor but sometimes I forget to take my pills.” I encourage the patient to always be truthful to their doctor so they can provide the best medical care.

I wish you all good health and a wonderful holiday season.

INTRAOPERATIVE NEUROMONITORING
By Ryan Lau, R. EEG/EP T., CNIM, CLTM, BA

Greetings IONM Enthusiasts,

The year 2009 has almost come to a close. Can you believe this? I remember when Y2K was such a large, almost pandemic year. Some hypothesized that computers around the world would crash and chaos would bring the world to anarchy. However, none of that happened and we are here almost ten years later and older,ouch! Ha! With every coming New Year, we also have the joy and celebration of the holidays with giving gifts to friends, family, and even our patients.

The gift that I personally like to bring to patients is the power of touch. Touch, such as a gentle pat on the shoulder or when a patient is telling you their history and you lay a hand on the patient’s arm for a caring empathetic understanding. Current peer reviewed literature suggests that touch causes the production of endorphins within the brain. These “feel good” brain chemicals can reduce stress, boost the immune system, and lastly make your patient feel better!

How can you, as an IONM Specialist, bring the power of touch to your patients? Prior to a patient’s surgery, (pre-operative outpatient testing, pre-operative holding day of surgery, or in the operating room prior to surgery) give your patient a pre-operative motor exam. A motor exam allows you to touch the patient as well as clinically test and gauge if they have any weakness in any of their extremities. You can use this information and correlate it to your intraoperative findings. After surgery, give your patient a post-operative motor exam. Again, this allows you to give the power of touch to your patient’s physiological well being and compare ending IONM data to your clinical post-operative motor exam.

The introduction of pre- and post-operative motor exams to IONM and patients has many positives. First, it allows the power of touch to the patient and all its benefits. Second, it increases your skill sets as an IONM Specialist. Thirdly, the motor exam information gives you essential information that you can correlate to intraoperative data and troubleshooting. Please contact me with any questions pertaining to performing motor exams or recommendations of how to correlate them with IONM.

Happy (belated) Turkey Day, Happy Holidays, and Happy New Year!!!

NERVE CONDUCTION STUDIES
By Dorothy Gaiter, R. EEG T., R.NCS.T., MHA

Being in the field of Electroneurodiagnostics for over 25 plus years, along with performing nerve conduction studies (NCS), has afforded me the opportunity to meet a number of interesting patients. I have had the privilege of making them feel comfortable during an uncomfortable test.

One of the first things I do for a patient is greet him or her with a smile that says, "I care and I am here to serve you with personalable and quality service." It is vital that patients are made to feel like they matter. Addressing patients by their name and simply touching them can show concern for their well-being.

We perform tests on outpatients and inpatients, and sometimes we run behind on getting patients in for their procedure. Therefore we have a sign, which reminds us, that reads, "If a customer is waiting be sure he knows why." More often than not, patients are quite receptive when we tell them why we are behind on getting their test done. Once I get a patient in the room for NCS testing, I always take a few minutes to explain the procedure to the patient in layman’s terms, but not in a condescending manner.

Prior to starting the actual procedure on a patient, I routinely follow a few simple, but effective rules that results in patients leaving with a smile on their face.

- Treating patients like people and not like a number makes them feel unique
- Lending an empathetic ear to what the patient is trying to convey
- Making sure that the patient is comfortable temperature wise (e.g. using a warm blanket)
- Touching the patient’s arm or hand, signifying that everything is going to be “okay.”
- Making conversation or small talk about something that interests the patient will make the time pass quickly,…
- Discussing the patient’s problems and not my own make the patient feel special
- Thanking the patient for allowing me to perform their test.

In conclusion, it is the job of every technologist to make a patient feel at ease and comfortable regardless of the procedure being performed. We have a plaque in the department that reads:

Whose Job Is It?
This is a story about four people named Everybody, Somebody, Anybody, and Nobody. There was an important job to be done and Everybody was sure Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that because it was Everybody’s job. Everybody thought Anybody could do it, but Nobody realized that Everybody wouldn’t do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could have done. Author unknown

NEUROFEEDBACK
By Riki Rager, R. EEG T., BS

As I was preparing for this article, a comment from the New King James Version Study Bible on Luke 1:3 caught my attention: “Luke did not express dissatisfaction with previous narratives of Jesus’ ministry, but he identified with those who went before him….Luke investigated his topic and he did it with care. He did not claim to know everything about Jesus, but what he described was studied and treated accurately.” The commentary confirmed the direction I wanted this section to take and you will understand why I say, I do not know everything about Biofeedback, Neurofeedback, or QEEG but I am studying and learning.

There have been those before me who wrote a special section concerning biofeedback and Leah Hanson’s section on New Technologies and Research sometimes covers these areas. Look for this section to concentrate initially on the fascinating history of these modalities.

In the June 2009 newsletter, Past President Elizabeth Mullikin requested that we all be willing to share our stories. In keeping with our theme of “gift giving” for this newsletter, I in turn have asked another
Neurofeedback . Continued from Page 21

Past President, Marvin Sams, if he would share his story of how and why he started doing Neurofeedback. Marvin agreed and I look forward to the inclusion of his story. Jay Gunckelum, who spoke for us at our Phoenix meeting on QEEG, will be sharing some of his stories. Dr. Joel Lubar, who published the first paper about using neurofeedback in the treatment of hyperactive children more than 30 years ago, has already spoken with me by telephone and I will include some of his comments as well as things I learned from him and his wife Judith through their Southeastern Biofeedback Institute training. Look for many others who have not yet sent their confirmations.

Consider the following quote: “In my opinion, if any medication demonstrated such a wide spectrum of effectiveness (as neurofeedback), it would be universally accepted and widely used.”— Frank Duffy, M.D., Director of the Developmental Neurophysiology Research Laboratory at Children’s Hospital, Boston. This famous quote is used in numerous textbooks and websites. So why isn’t it accepted and used widely?

As you read this, if you have no idea what biofeedback and neurofeedback are, ask yourself the question, why? They are in some ways very much a part of what we do every day. So do technologists with our unique qualifications have a place in this exciting world? Let’s explore this together and find out.

NEW TECHNOLOGIES AND RESEARCH
By Leah Hanson, R. EEG/EP T.

This edition was structured as our “gifts” to each other by sharing some of our interest and/or expertise as it applies to the field. My current “gift” is the research of electrodes and my hope that someday soon we will all be using electrodes that function better and require less application to obtain data. Nearly every other medical specialty had found a way to “recreate the wheel” regarding their electrodes whether they have transitioned to fully disposable products or products that are faster and easier to apply.

New technology not only comes in the form of software and new capital equipment but also in the form of new peripherals. As a dynamic and evolving medical specialty we will continue to look at better tools of all types to better the medical accuracy and diagnostic process for our patients.

One such interesting tool is the new “Sleep Stage” alarm clocks in the market that claim they can assist you with awakening when it is the most optimal to feel rested (i.e., using a sleep staging method to pick the best stage to awaken). These are driven from data obtained either from a headband type of device or a wrist device. Various models are available. Clearly these devices are using a technique that is different than information used in a diagnostic study but enough information to attempt to persuade the consumers of its usefulness. These devices may be opening a door for more investigations and research that can affect us in so many ways. Looking forward to a great 2010.

PEDIATRICS AND NEONATOLOGY
By Shelley Gregory, R. EEG T.

So, “a little gift of expertise” is what our fearless leaders, Margaret Hawkins and Lucy Sullivan, want us to submit. I am sure that it holds true for any hospital but when it comes to pediatrics any ideas are always appreciated. As some of you know, I have been at Seattle Children’s Hospital for the last 29 years but I am always learning something new.

This one idea comes from long ago and I continue to use it. When I am the “holder” (pediatric term for distracter and assistant holding the patient on the bed for hookup) for another technologist I start to quietly hum and proceed to sing different songs. It is amazing how a two-year old or noncompliant teenager will lay on the bed and stop fussing when they hear a constant song over and over. If they are really lucky I may add a conversation to the other technologist into the tune. Imagine in the tune of “Mary Had a Little Lamb” telling the other technologist that the patient’s eyes are getting heavy with sleep or they have a handful of wires!!! Try it, it really does work, not to mention being able to find out what the other technologist did over the weekend in the tune of “The Entert Weensy Spider.”

My second “little gift” is something that is more personal and helps me with closure as well as lets the family know I am thinking of them. When we work with patients and families more than once, we all develop a bond. Some of their times are quite trying as well as downright sad. If one of my patients passes I like to send a card to the family so that they know what they meant to me during our time together. I always remind them as well as myself how much they taught us in their short time in this life. It is always a very difficult balance between professional and personal and doesn’t get any easier after 29 years.

Have a wonderful holiday season.

POLYSOMNOGRAPHY
By Kathy Johnson, R. EEG/EP T., RPSGT

“Pearls of Wisdom” is the topic for this issue of the Newsletter. I have been the recipient of many pearls in my 30+ years in this profession and I think one of the best ones is what I would call the “pay it back” principle, which is part of what we do in each issue of this newsletter by sharing things with each other.

If you learn something, teach it to someone else. This may be by sitting down to help someone learn the way to calculate frequency and amplitude or the polarity convention. It may be by writing an article in a newsletter or a journal or by giving a presentation at a meeting. It may be something as simple as telling a colleague what hair clips worked well when you have a patient with thick hair or some other trick of the trade you learned the hard way.

One example from my life is this. Many years ago I was asked to be one of two speakers at an ASET seminar on sleep. For those of you who have done this, you know it is not all fun and games, but it is very rewarding. There are two days of pretty intense teaching/learning with just two speakers alternating their presentations. I was somewhat hesitant to take on this task but eventually signed on, despite my misgivings about all the work involved, because I felt obligated to pass on what I had learned from my mentors. Little did I know that my co-speaker, whom I had never met, would turn out to be my long-distance friend (and co-leader of this section). It is likely that we both got far more from this seminar than any of our students.

So, my “pearl” is this: Pay It Back. Your efforts will be rewarded tenfold and our profession, and our world, will be a better place for it.

TECHNOLOGISTS WORKING ALONE
By Beth A. Anderson, R. EEG T., BA

Recently having walked through the door of successful completion of ABRET board examinations into the circle of registered technologists, I have experienced a delightful sense of accomplishment and satisfaction and a better understanding of the expression “soaring with eagles” as well as the potential for future endeavors in neurodiagnostics!

This professional journey actually began as I was about to begin my career as a Jr./Sr. High School biology teacher upon learning our family of two would be blessed by a child! In the midst of decision making we
chose that I would work at home and I embarked on a medical transcription career, which served our purposes at that time very well. Being married to somewhat of a nomad, I found myself relocating and our children (our first a girl with two brothers to follow) in school and a void in my professional life...no patient contact...very remote interaction with the physicians I served. Thus, I became restless, wondering "if Dr. Sahoo needs any support staff" while transcribing dictation of this neurologist who gave me a chance and the beginning of the transformation to becoming a dedicated and compassionate EEG technologist.

Admittedly my first transcription efforts of EEG reports increased my apprehension as to whether this was a career path on which I should embark. There were some very unique descriptions! Who else would one talk to other than the wonderful leaders of ASET? From the first phone call to Faye McNall with questions from education to the professional intricacies of electroencephalography and spanning the time to the writing of this article, whenever I have called on the people at ASET they have given to me personally their time, expertise, and encouragement openly and enthusiastically.

Almost immediately I latched onto the goal of becoming registered because I knew that from that point I would have the assurance that I understood the basic elements of EEG technology and that confidence as a technologist was how I could best serve the patients and neurologists for whom I performed studies. Knowing I could not relocate and that I was not a traditional student (again!), I embarked on my first ASET online classes and sailed through some courses with more waves and storms than others, yet each one successfully. I found the interaction with the instructors and discussing waveforms and concepts through posting assignment responses with fellow students to provide a network and camaraderie with others that I could not achieve elsewhere because I work independently. I find the neurologists I work with to be very accessible and our didactic conversations are quite enlightening, however, there is no substitute for relationships with mentors and colleagues of the same station.

I will admit my favorite ASET class was actually a Webinar class with Dr. Richard Brenner. This is because, as you by now have probably perceived, I enjoy interacting with others. But foremost for me today is that just a month before my final oral boards, I heard Dr. Brenner say to me over my computer speaker, something like: that was a good pick up on the posterior slowing. What a confidence builder, so needed more than any other facet of my preparation at that point.

Working independently has its times of challenge, however, I don’t believe my hurdles are any greater than the encumbrances inherent when working closely with others; both situations harbor their own specifics to accept and manage. This holiday season hopefully I have brought to the table the benefits and treasures found whether working independently (and don’t we all as we pursue ABRET individual registration) or in collaboration with others, ASET contributes our labs with guidance and professionalism. As our family grows and we each continue on our professional endeavors one of the greatest things we can anticipate is our next ASET class and learning from physicians and technologists as well.

Thank you, ASET leaders, for providing this open door of communication to help us stay focused in the New Year and for so kindly supporting our profession and caring about the family!
### Ready References

The following listings are numbers and addresses frequently requested from the ASET Executive Office. They are published as a service to members.

#### International & Foreign END Societies

**Canadian Association of Electroneurophysiology Technologists**
Kimberly Skanes, RET, RT [EMG], The Moncton Hospital Electrodiagnostic Services, 135 MacBeath Ave., Moncton, NB E1C 6ZB; 506.857.5272; 506.857.5697 fax; kiskanes@sehcc.health.nb.ca; www.caet.org

**International Organisation of Societies for Electrophysiological Technology [OSET]**
Karen Woolcock, Staffordshire General Hospital, Stafford, ST163 SA, United Kingdom: +44(0)1785 230237 fax; karenwoolcock@hotmail.com

### Regional, State & Local END Societies

**Alabama Society of END Technologists**
Allen Lee, R. EEG T., President; www.alaset.org

**Central Society of END Techs [CSET]**
Ed Carlson, R. EEG/EP T., CNIM, CLTM President, 651.241.5192; edovaldo@hotmail.com

**Charles E. Henry Society of END Techs**
Steve Erickson, R. EEG T., President, Epilepsy Monitoring Unit, Strong Memorial Hospital, Rochester, NY 14642; steve.erickson@urmc.rochester.edu; www.chenyssociety.org

**Greater New Orleans END Society**
Lynn Causey, R. EEG T., President, Children’s Hospital, 200 Clay Ave., New Orleans, LA 70118; 504.896.9596; cyoung@chnola.org

**Illinois Society of END Technologists**
Phyllis Skowron Videtic, R. EEG T., President, 2907 Heritage Drive, Apt. 3, Joliet, IL 60435; 815.725.7133 ext. 3824; videtic@provenahealth.com

**Indiana Society of END Technicians & Technologists**

**Iowa Association of END Technologists**
Dawn Byrne, R. EEG T., President, Trinity Regional Medical Center, 802 S. Kenyon Rd., Ft. Dodge, IA 50501; 515.574.6189 phone; bymd@ihs.org

**Michigan Society of END Techs (MSET)**
Connie Kubiak, R. EEG/EP T., CNIM, CLTM President, Munson Hospital, 9239 Vans Lane, Kingsley, MI 49649; 231.590.7118; ckuubiak@mhc.net www.msetinfo.org

**Minnesota ENT Technologists Society [METS]**
James Kvasnicka, R.NCS.T., CNIM, President, 640 Jackson St, St, Paul, MN 55101; 651.254.3740; james.l.kvasnicka@healthpartners.com

**New England Society of END Technologists**
Jack Connolly, R. EEG T., President; 617.355.7847 jack.connolly@childrens.harvard.edu

**North Carolina Society of END Technologists**
Doaty Flanigan, 170 N. Davidson Dr., Winston-Salem, NC 27107; 336.718.5569; doaty lucky@yahoo.com

**Ohio Society of END Technologists**
Sheryl Nehamkin, R. EEG/EP T., CNIM, CLTM, President, 4075 Eastway Road, S. Euclid, OH 44121; 216.844.2377; nehamkin@aol.com

**Puget Sound END Society**
Carol Riley, R. EEG/EP T., RPSGT, CNIM, President, Puget Sound Health Care System; 206.277.3301; carol.riley@med.va.gov

**Southern Society of END Technologists**
Kyle Kalkowski, R. EEG T., President, 8102 Lair Court, Chapel Hill, NC 27516; 919.966.1686; kkalkows@unch.unc.edu; www.sset.org

**Western Society of Electrodiagnostic Technologists**
Kristin Roberts, R. EEG/EP T., President; 714.771.8000 ext. 7187; robertsk@charter.net; www.wset.org

**Wisconsin Society of END Techs**
Colleen Helling, R. EEG T., RPSGT, President, 1413 Terrace Court, Two Rivers, W I 54241; 920.288.4350 or 920.553.7075; helling@lakefield.net

### Other Resources

**Committee on Accreditation for Education in Electroneurodiagnostic Technology [CoA-END]**
Theresa Sisneros 6654 S. Sycamore St., Littleton, CO 80120 303.738.0770; 303.738.3223 fax office@coa-end.org

**Epilepsy Foundation**
8301 Professional Place, Landover, MD 20785-7223; 800.332.1000; www.epilepsyfoundation.org
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Rebecca Clark-Bash, R. EEG T, CLTM, CNIM, FASN M

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Board Prep Courses: New Exam Formats
• CNIM* Track I Prep . . . . . . . . Jan 9-10, Jan 23-24, Feb 13-14
  June 19-20, June 26-27, July 10-11
• CNIM* Track II Prep . . . . . . . . Jan 8-10, Jan 22-24, Feb 12-14
  June 18-20, June 25-27, July 9-11
• R. EP T.* Prep . . . . . . . . . . . Jan 8-9, Jan 22-23, Jan 12-13
  June 18-19, June 25-26, July 9-10
• CLTM* Prep . . . . . . . . . . . . . . April 17-18, Aug. 14-15
• R. EEG T* Written Prep . . . . . . . April 10-11, August 28-29
• R. EEG T* Oral Prep . . . . January 30-31, Feb 4-5, Aug 28-29
• R. EP T.* Oral Prep . . . . . . . . . . . . Feb 4-5
• Polysomnography Board Prep NEW Format
• Nerve Conduction Exam Prep

Comprehensive Interactive Courses:
• Intraoperative Neurophysiologic Monitoring . . . . . . . . . . . . . Feb 25-27, Sept 16-18
• Electroencephalography . . . . . Feb 9-11, April 5-9, July 6-8, Aug 23-27
• Evoked Potentials . . . . . . . . . . . . . Mar 4-5, Sept. 2-3
• Nerve Conduction Studies
• Physician Training
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5 Courses - 5 Days
• Evoked Potentials Board Preparation
  January 11 – 12, 20 10  M-T
• Nerve Conduction Study Fundamentals
  January 11 – 12, 2010 M-T
• CNIM Board Preparation
  January 13 – 14, 2010 W-Th
• Basic Principles of EEG
  January 13 – 15, 2010 W-F
• Intraoperative Monitoring Fundamentals
  January 13 – 15, 2010 W-F

Continued on page 26 ▶
ASET Foundation

Larry Head Institute Workshops
Continued from Page 25

2010 COURSES

- **EEG Fundamentals**
  March 8 – 12
  July 12 – 16
  November 1 – 5

- **EEG Board Preparation**
  April 1 – 3
  August 26 – 28

- **Evoked Potential Fundamentals**
  May 17 – 21
  October 11 – 15

- **Evoked Potential Board Preparation**
  January 11 – 12 (Las Vegas)
  July 8 – 9

- **Intraoperative Monitoring Fundamentals**
  January 13 – 15 (Las Vegas)
  April 15 – 17
  August 5 – 7
  November 18 – 20

- **CNIM Board Preparation**
  January 13 – 14 (Las Vegas)
  June 18 – 19

- **Nerve Conduction Studies**
  January 11 – 12
  June 25 – 26
  October 8 – 9

- **Polysomnography**
  TBA

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ASET calendar of events

### 2010 ASET EDUCATIONAL SEMINARS

**March 19 - 20, 2010**
Philadelphia, PA
EEG Technology: A Comprehensive Review Course
Mastering Nerve Conduction Studies
**Scholarship Deadline: January 20, 2010**

**October 22 – 23, 2010**
Ann Arbor, MI [Host – University of Michigan Health System]
EEG Technology: A Comprehensive Review Course
Essentials of LTM and ICU Monitoring
**Scholarship Deadline: August 23, 2010**

### 2010 ASET ANNUAL CONFERENCE

**Setting the PAC**E FOR END TECHNOLOGY

**August 4 – 7, 2010**
Louisville, KY
Kentucky International Convention Center
Scholarship Deadline: May 4, 2010

Visit the ASET website, [www.aset.org](http://www.aset.org) and click on the Meetings tab for course schedules, hotel accommodations, faculty, registration rates, and to register online.

_To apply for a scholarship, click here and return the complete application by the designated deadline._