Notes from the Chair
by Catherine M. Foss, BS, RRT, RPFT

The AARC International Congress, held in October in Tampa Bay, Fla., featured a fantastic lineup of diagnostic-related topics. It will be tough to beat this year’s program, so I need your help with ideas for next year. Proposals are due at the end of December for the program to be held in Las Vegas in December, 2003. I would appreciate hearing from as many practitioners as possible regarding the professional needs and wants of those in the diagnostic setting. Drop me a line via email (see address on page two) with your suggestions. And remember: you don’t have to make a formal proposal application; initially, we just need to generate ideas.

For those of you who were unable to attend the Congress this year, CDs and tapes of the lectures are available for purchase from the AARC.

Send Us Your Email Address!

Beginning next year, the Bulletin will be published on a quarterly, rather than bimonthly, basis. But that doesn’t mean we’ll be communicating with you less often than before. The plan is to increase communication to members via a monthly email which will feature items of interest to the section. If you’re already receiving email messages from the AARC, you will automatically receive these emails. If you aren’t getting AARC email, that means we don’t have your email address. To ensure you don’t miss out on these timely publications, send your email address to: mendoza@aarc.org.

Section Business Meeting

by Catherine M. Foss, BS, RRT, RPFT

The section enjoyed a successful business meeting during the AARC International Congress in Tampa Bay. As I began the discussion of issues with practitioners from around the country, I shared a quote I recently came across: “A chairperson is like the parsley on top of the fish.” In other words, as section chair, I am nothing without all of you. This section is for and about all of the diagnostic practitioners working day-to-day across the country. We all need to be involved! In this Bulletin you will find a sign up sheet for various section positions that need to be filled in the coming year. Please consider how you might become more involved in the section and fax your responses to me at the number listed on page two.

At the meeting, we had a lengthy discussion on the issues affecting diagnostic practitioners in the area of state licensure. A committee was formed to look at the issues and draft a document to provide to state societies. The debate centers around the fact that some states have excluded NBRC-credentialed staff (RPFT, CPFT) who are not RRTs from performing testing. In other instances, credentialed polysomnography technologists are being similarly limited in the scope of their practice.

The role of polysomnographic techs in our section was also addressed at the meeting. The Diagnostic Section membership currently includes sleep practitioners, along with those performing testing in the pulmonary and cardiac realms. There was a suggestion this year at the Board level to move sleep practitioners to a “roundtable” - a designation for special interest groups within the AARC which are too small to have a separate section. I would like to hear your thoughts about this potential change.

Please drop me a line anytime to discuss this or other issues.

CPFT Exam Tips

by Catherine M. Foss, BS, RRT, RPFT

Issues of interest to many in the section regularly come up on the Diagnostic Section listserve or AARC Helpline. Recently, someone asked for help in finding educational resources to assist in preparing for the NBRC CPFT exam. Here are some ideas to help those of you who also are considering furthering your credentials in this direction. In future Bulletin editions we will address other suggestions for preparing for the RPFT and Polysomnography exams.

1. First and foremost, go online to the NBRC web site and take their free practice exam to evaluate your current level of readiness. You can also purchase a practice exam, which you can take and mail back in to receive detailed feedback on questions that were answered incorrectly. http://www.nbrc.org/

2. Consider purchasing the study guide and practice exam available from the Kettering Group. These resources provide a very thorough review of the information covered on the exam. Kettering also offers exam preparation seminars, although the manuals and study guides can be purchased without attending the seminar. http://www.ketteringseminars.com/

3. Medical Graphics sponsors a traveling lecture series once or twice a year. Held in various locations across the country, these two to three day training sessions are taught by the top names in the field (most of them helped write the exam questions). While not specifically designed to prepare for the exam, the sessions are very appropriate for review. http://www.medgraphics.com/education.html#seminar


Section Connection

GET IT ON THE WEB:
Help the AARC increase its efficiency by signing up to receive the Bulletin via the section homepage on the AARC website (www.aarc.org). To change your option to the electronic Bulletin, send an e-mail to: mendoza@aarc.org.

JCAHO ACCREDITATION REPORT:
Please consider sharing information about your most recent site visit by filling out the form on the AARC web site found at the following link: www.aarc.org/members_area/resources/jcaho.asp.

SECTION LISTSERVE:
Start networking with your colleagues via the section listserv. Go to the section home page on www.aarc.org and follow the directions to sign up.

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**New Diagnostic Tool for Asthma**

Researchers from the University of Oklahoma (OU) have found a novel way of using a laser to analyze exhalations of asthma sufferers, opening the door to more accurate diagnosis and prescriptive treatment.

By coupling a laser spectroscopy system to a tunable laser, they created a device that can accurately and simultaneously measure both carbon dioxide and nitric oxide levels of a single exhalation of breath. The precise measurements provided by the instrument might help health care professionals evaluate airway inflammation and prescribe medications at a level of accuracy corresponding to the measurement, thereby providing the most efficient and effective treatment while eliminating overmedication.

The researchers note current methods to diagnose and treat asthma require professionals to assess how much air is actually flowing through a patient’s airways, a process made more difficult with airway inflammation. Airway inflammation itself is most often assessed by physically invasive procedures.

Earlier research found that asthmatics exhale more nitric oxide when their airways are inflamed, making measurement of its levels the preferred method for determining inflammation severity. At present, nitric oxide levels are measured with devices that analyze chemiluminescence, a photochemical reaction between nitrogen and an ozone sample. However, multiple tests are sometimes necessary, and chemiluminescence-based devices require periodic recalibration, whereas the OU laser does not.

The device is currently undergoing clinical trials. Initial findings have been published in two journals of the Optical Society of America: the October edition of Applied Optics and the January 15 edition of Optics Letters.

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**Smoking, Infections, and Artherosclerosis**

Cigarette smoke - inhaled voluntarily or involuntarily - can turn the entire body into a breeding ground for infection, leading to chronic infections that in turn foster the buildup of artery-clogging plaque, according to a study reported in the September issue of Stroke. The finding may help explain why some smokers prematurely develop the artery-clogging process that causes most heart attacks and strokes, while others remain free of arterial plaque buildup until they are older.

In the study, current and ex-smokers who had common chronic infections - such as bronchitis, ulcers, urinary tract infections and even gum disease - were more than three times as likely to develop early atherosclerosis than people without such infections. Infection also promoted artery disease in people exposed to secondhand smoke.

“T his study provides the first epidemiological evidence that the atherosclerotic effects of smoking are mediated in part by chronic infectious illnesses in smokers,” says lead researcher Stefan Kiechl, MD, professor of neurology at Innsbruck University Hospital in Austria.

The researchers used ultrasound scans to examine changes in the carotid arteries of 826 men and women ages 40 to 79. Over the five-year study period, 332 developed new carotid plaques. The risk of developing atherosclerosis was closely associated with the number of years and quantity of cigarettes smoked, regardless of gender, but chronic infection also had a role in plaque development. Nonsmokers with chronic infection had 1.8 times the risk of premature atherosclerosis as nonsmokers free of infection. Among former smokers with infection, the risk was 1.9 times higher, while current smokers with infection had 2.9 times the risk for premature atherosclerosis as infection-free nonsmokers. In ex-smokers with chronic infection, the risk of early atherosclerosis remained elevated even 10 years after they quit, while ex-smokers without infection showed a gradual decrease in risk over time.

“We found that the ongoing risk after quitting is probably the result of chronic infections that develop during the active smoking period, especially respiratory infections, such as smokers’ bronchitis or chronic obstructive pulmonary disease,” says Kiechl. Since the group of passive smokers in the study with chronic infection also faced an increased risk of early artery disease, researchers hypothesize that secondhand smoke renders individuals susceptible to respiratory infection and that infection increases the risk of artery disease.

The study concludes smokers should be made aware of these dangers and be advised to seek treatment for their chronic infections.

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Want to receive this newsletter electronically?  
E-mail: mendoza@aarc.org for more information.
Significant changes are underway at the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Over the next couple of years, a new JCAHO initiative called “Shared Visions - New Pathways” will progressively sharpen the focus of the accreditation process on care systems critical to the safety and quality of patient care.

“Shared Visions” represents agreements among the Joint Commission and health care organizations as to what a modern accreditation process should be able to do and achieve as a constructive driver toward the provision of safe, high quality care. “New Pathways” represents a new set of approaches or “pathways” to the accreditation process that will support fulfillment of the shared visions.

The new pathways include:

- A required mid-cycle, self-assessment during which the health care organization will evaluate its own compliance with the applicable standards and develop a plan of correction for identified areas of non-compliance. Validation of corrections and other randomly selected self-assessment findings will occur during the onsite survey at the end of the triennial period.
- A pre-survey review of organization-specific information, such as ORYX core measure data, sentinel event information and MedPar data, through an automated process to identify critical processes relevant to patient safety and health care quality for evaluation during the onsite survey.
- Substantial consolidation of the standards to reduce the paperwork and documentation burden of the survey process and increase its focus on patient safety and health care quality.
- Onsite evaluation of standards compliance in relation to the care experience of actual patients.
- Revision of individual organization performance reports to provide performance information not portrayed in the current reports.
- Active engagement of physicians in the new accreditation process.

“Shared Visions - New Pathways” represents the next step in the evolution of accreditation,” says JCAHO President Dennis S. O’Leary, MD. “It shifts the focus from survey preparation to focusing on operations and internal systems that directly impact the quality and safety of care.”

An in-depth look at the new accreditation process is available online in a special 16-page edition of Perspectives, the Joint Commission’s official newsletter: www.jcrinc.com/perspectives. Questions may be emailed to sharedvisions@jcaho.org.

Become an Official AARC Ambassador Today!
Contact Sherry Milligan at milligan@aarc.org
**Women More Sensitive to Cough**

Researchers testing the responses of both sexes to tussive agents find that cough sensitivity is greater in females than males. The study tested 118 patients, 68 of whom were female, with inhalation cough challenges at a clinic for chronic cough.

The inhalation cough challenge materials were inhaled through a mouthpiece for 1 second and the number of coughs in the first 10 seconds after inhalation were recorded. The researchers used inhaled capsaicin, a white crystalline extract of red pepper, and citric acid to cause coughing. Measurements of each successive cough challenge were significantly lower for female patients when compared with male patients. Cigarette smoking and the type of cough being treated did not influence the results.

The investigators note this study of a large group of patients with chronic cough has shown for the first time that women have a heightened cough reflex sensitivity to both capsaicin and citric acid cough challenges. A similar difference between the sexes was also seen in the clinic for two principal diagnostic categories, asthma and gastroesophageal reflux disease.

The study was published in the first October issue of the American Journal of Respiratory and Critical Care Medicine.

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**CPFT EXAM TIPS**

especially for the various analyzers that are covered on this exam. Do not skip this book! The books can be purchased at http://www.aarc.org/bookstore/rc.html, and most medical libraries also carry them. Additionally, Susan Blonshine and Robert Brown have published a book on spirometry that offers in depth coverage, plus QA and QC. You can purchase the book directly from Susan at TechEd, her consulting/education firm. (TechEd Consultants, 1012 Pelican, Mason, MI 48854, Phone/Fax (517) 676-7018)

5. Try to get lots of hands on training, if you have not already done so. Also, if your institution only has one type of instrument, check out neighboring facilities to gain exposure to other types. It is hard to take a test on technology that you have only read about and not been exposed to hands on. Some of the questions involve equipment troubleshooting. You’ll get more helpful education on those issues from experience than from books. You should definitely look at volume displacement spirometers, pneumotachs, the various diffusion techniques and gases, N2 washout and helium dilution.

6. Be sure to study up on ABGs and QA/QC in the ABG lab. Read the Shapiro and Malley books. Also, Westgard, the QA guru, has an online site for laboratory QA: http://www.westgard.com/

7. Try to spend some time in an ABG lab, at least observing, but preferably performing analysis and QC/QA.

8. Pick a date to take the test, then plan your review schedule. Set aside a specific amount of time per week to review for the test. Take the NBRC pre-test to evaluate you weak points, then look up the information in your reference books to fill in the gaps.

9. If others at your facility are planning to take the exam as well, consider forming a study group to meet during lunch.

Finally, good luck! And congratulations on taking this step to further your knowledge and credentials in the field of diagnostic respiratory care.