



The Official Publication of the American Association for Respiratory Care  
May 2012 Vol. 36, Issue 5 www.aarc.org \$10.00

# Times

**RTs INSPIRE,  
MAKE A  
DIFFERENCE  
in Lung Disease  
Awareness**



**Attend the AARC  
Summer Forum**

July 13-15  
Santa Fe,  
New Mexico

Right: RT student Joe Colello changed careers to help patients like his daughter Lucy.

Left: Lisa Harrison, RRT, AE-C, promotes lung health at a Healthy LifeStyle Expo.



**THE NEXT BEST THING  
TO NATURAL BREATHING**

**MAQUET**  
GETINGE GROUP

**SERVO-i® with NAVA® provides assist based on the patient's own drive to breathe.**

NAVA (Neurally Adjusted Ventilatory Assist) is MAQUET's exclusive neurally closed loop technology that promotes synchronous harmony between the patient and ventilator. With NAVA, diaphragmatic activity is monitored during all modes of ventilation providing clinicians a new vital sign to help evaluate and correct dyssynchrony, and interpret effects of treatment. Non-invasive NAVA, NIV NAVA®, provides assist levels capable of matching the patient's neural demands regardless of leakage or user interface.

**Neural-driven support — the essence of natural breathing.**

NAVA, NIV NAVA, and SERVO-i are registered trademarks of MAQUET Critical Care AB.





## Coming of Age | 6

Common comorbidities, complications, and consequences. By Helen M. Sorenson, MA, RRT, FAARC

## Chronic Disease Manager | 10

Low-literacy patient education and adherence. By William F. Galvin, MSED, RRT, FAARC, and Allison Iaccarino, AS, CRT

## Sleep Waves | 14

Best practices in the sleep lab.

## Ventilation for Life | 16

Ventilation studies of note.

## 5 Questions for AARC Program Committee Chair Cheryl Hoerr, MBA, RRT, FAARC | 28

AARC Congress 2012 program planners are already hard at work to ensure we will provide the tools and resources you need to succeed under the changing health care paradigm.

## All in the Family | 34

Loved ones with pulmonary problems inspire RC students' careers. By Joe Colello and Amy Watkins

## 10 Things To See and Do in Santa Fe | 40

Summer Forum venue combines art and culture with Native American heritage.

## Summer Meetings Program | 44

The AARC is heading to Santa Fe, NM, for its annual Summer Meetings, including the Summer Forum, NBRC's Item Writing Workshop, CoARC's Meet the Commission, and two additional AARC courses: Building a Simulation Toolbox, and Getting the Best Return on Your Investment: Maximizing Patient Education.

## Raising Asthma Awareness | 61

Four AARC members explain how they do it and why. By Debbie Bunch

General Counsel | 20

Government Advocacy | 22

Observations | 26

Industry Watch | 68

New Members | 70

Marketplace | 74

RC Currents | 76

Classified Advertising | 82

Calendar of Events | 84

Advertiser Index | 84

## AARC Strategic Plan

**AARC Vision/Mission Statement:** The American Association for Respiratory Care (AARC) will continue to be the leading national and international professional association for respiratory care. The AARC will encourage and promote professional excellence, advance the science and practice of respiratory care, and serve as an advocate for patients, their families, the public, the profession, and the respiratory therapist.

## AARC Strategic Objectives

- Validate the science of respiratory care and the value of the respiratory therapist (RT) in providing respiratory care by supporting, conducting, and publishing research information.
- Promote respiratory therapists as the best providers of respiratory care by assuring that the science that clarifies the value and role of the RT is provided to those stakeholders whose decisions and actions need to be guided by that information.
- Promote respiratory therapists and the American Association for Respiratory Care by developing and implementing promotion and marketing campaigns targeted to unique audiences.
- Assure the Association has the resources to meet the needs of its members and that the AARC has the needed financial, volunteer, and staff resources needed to accomplish the implementation of the strategic plan of the Association.

The complete version of the Association's Strategic Plan is available to AARC members online at [www.aarc.org/members\\_area/resources/strategic.asp](http://www.aarc.org/members_area/resources/strategic.asp).

## Editor

Marsha Cathcart, BA

## Managing Editor

Thomas Kallstrom, MBA, RRT,  
FAARC

## Assistant Editor

Karen Singletery, BS

## Contributors

Debbie Bunch, BA  
Sheila Henegar

## Art Director

Donna Knauf, BA

## Graphic Designers

Jeanette Chawdhury  
Lisa Dudley  
Kelly Piotrowski

## Consultant

Sherry Milligan, MBA, CAE

## Director, Advertising Sales

Tim Goldsbury, BA, RRT  
Goldsbury@aarc.org

## Advertising Sales Consultant

Andrea Conté  
andrea@aarc.org

## Advertising Rates and Media Information

Contact: Goldsbury@aarc.org  
Tim Goldsbury, 725 N. Highway  
A1A, Ste. C-106, Jupiter, FL 33477  
Voice (561) 745-6793  
Fax (561) 745-6795

## Advertising Materials

Send production materials for AARC publications to Binkley@aarc.org or AARC 9425 N. MacArthur Blvd., Ste. 100 Irving TX 75063 c/o Beth Binkley Voice (972) 243-2272 Fax (972) 484-2720

AARC Times and RESPIRATORY CARE — the only official publications of the AARC

Daedalus Enterprises, Inc.  
9425 N. MacArthur Blvd., Ste. 100  
Irving, TX 75063  
(972) 243-2272  
Fax (972) 484-2720

## Director of Business Development

Dale L. Griffiths, BA

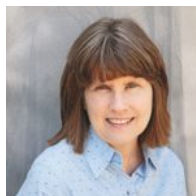
## Publisher

Sam P. Giordano, MBA, RRT, FAARC



Printed in USA

## ► Meet the AARC Staff



### Debbie Bunch

Writer  
AARC Times  
debbunch@aol.com



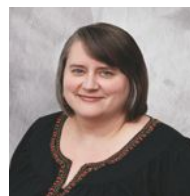
### Donna Knauf

Art Director  
knauf@aarc.org



### Jeanette Chawdhury

Graphic Designer  
knauf@aarc.org



### Lisa Dudley

Graphic Designer  
knauf@aarc.org



You know **ONLY** capnography measures real-time adequacy of ventilation.

But did you know  
**Oridion Capnography**  
protects your non-intubated patients in  
the ICU and General Floor too?



Only capnography measures adequacy of ventilation as recommended by patient safety standards (ASA, APSP, Joint Commission)<sup>1,2,3</sup>. No matter how you measure respiratory rate, it gives you only a partial picture of ventilation.

**Protect all your patients with Oridion Capnography:**

- ✓ Crisp, accurate waveforms
- ✓ Simple to use
- ✓ Comfortable for your patients

Learn more at [www.oridion.com](http://www.oridion.com).

1 ASA Standards for Basic Anesthetic Monitoring, Committee of Origin: Standards and Practice Parameters (Approved by the ASA House of Delegates on October 21, 1986, and last amended on October 20, 2010 with an effective date of July 1, 2011) - Viewed 3-21-11 at [www.asahq.org/Standards%20Guidelines%20Stmts/Basic%20Anesthetic%20Monitoring%202011.ashx](http://www.asahq.org/Standards%20Guidelines%20Stmts/Basic%20Anesthetic%20Monitoring%202011.ashx)

2 Stoelting R and Overdyk F. Anesthesia Patient Safety Foundation, Conclusions and Recommendations from June 08, 2011 Conference on Electronic Monitoring Strategies to Detect Drug-Induced Postoperative Respiratory Depression. Accessed August 25, 2011 at <http://www.apsf.org/announcements.php?id=7>.

3 Standards for Basic Anesthetic Monitoring. American Society of Anesthesiologists. Accessed 6/20/11 at <http://www.asahq.org/For-Healthcare-Professionals/-/media/For%20Members/documents/Standards%20Guidelines%20Stmts/Basic%20Anesthetic%20Monitoring%202005.ashx>



# AARCconnection . . .

maximizing your membership

## News Updates

The AARC's NewsNow@AARC newsletter helps to keep you informed of upcoming classes and events, government affairs news, special discount offers, and updates about the profession. To receive the e-newsletter, make sure the AARC has your current email address at the "Update Records" button on <http://www.AARC.org>

## Checklists

The AARC has released two patient safety checklists to help minimize the likelihood of medical errors relating to the patient's oxygenation status during intra-hospital transport. One is for neonates/newborns and the second is for pediatric/adult patients. **Free for AARC Members** at [http://www.aarc.org/resources/safety\\_checklist/](http://www.aarc.org/resources/safety_checklist/)

## Help with Medicare Billing

The new "Pulmonary Rehabilitation Toolkit" is an educational resource designed to aid respiratory therapists, PR program directors, hospital charge masters, and financial directors with the information and examples they need to accurately establish the charges for their PR programs when they bill Medicare. **Learn more at** [http://www.aarc.org/headlines/12/03/pr\\_toolkit.cfm](http://www.aarc.org/headlines/12/03/pr_toolkit.cfm)

## Lectures from AARC Congress 2011

Some of the best lectures in respiratory care are presented at the AARC Congress. If you missed them, they are still available back to 2005 (at low cost). **Get them at** <http://www.siattend.com/Association.aspx?aic=AARC>

**Follow Us on Twitter and Facebook.**

**Visit [www.AARC.org](http://www.AARC.org)**



## Information Contacts:

### AARC Membership or Other AARC Services:

American Association for Respiratory Care • 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063 • (972) 243-2272 • Fax (972) 484-2720 • [www.aarc.org](http://www.aarc.org)

### Respiratory Therapist Certification & Registration:

National Board for Respiratory Care • 18000 W. 105th St., Olathe, KS 66061-7543 • (913) 895-4900 • Fax (913) 895-4650 • [www.nbrcc.org](http://www.nbrcc.org)

### Accreditation of Education Programs:

Commission on Accreditation for Respiratory Care • 1248 Harwood Rd., Bedford, TX 76021-4244 • (817) 283-2835 • Fax (817) 354-8519 • [www.coarc.com](http://www.coarc.com)

### Grants, Scholarships, Community Projects:

American Respiratory Care Foundation • 9425 N. MacArthur Blvd., Ste. 100, Irving, TX 75063 • (972) 243-2272 • Fax (972) 484-2720 • [www.arcfoundation.org](http://www.arcfoundation.org)

*AARC Times* (USPS 491-930) (ISSN 0893-8520) is a monthly publication of Daedalus Enterprises, Inc., for the American Association for Respiratory Care. Copyright © 2012 by Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. All rights reserved. Reproduction in whole or part without the express written permission of Daedalus Enterprises, Inc., is prohibited. The opinions expressed in articles, departments, or editorials are those of the author and do not necessarily reflect the views of Daedalus Enterprises, Inc., or the American Association for Respiratory Care.

**Periodicals Postage:** Paid at Irving, TX, and at additional mailing offices. POSTMASTER: Send form 3579 to *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706.

**Change of Address:** Six weeks' notice is required. AARC members should include their membership number when submitting an address change. Non-member subscribers should provide old mailing label and new address. Send changes to *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. Periodicals postage paid at Irving, TX.

**Article and Feature Contribution:** *AARC Times* welcomes AARC member contributions of feature articles and information for the regular departments. All materials should be submitted via email to Editor Marsha Cathcart at [cathcart@aarc.org](mailto:cathcart@aarc.org). Letters from members will be considered for publication if they relate to specific articles appearing in *AARC Times* within the last three months. Editorials may be published if they are of interest to the AARC membership. The editor reserves the right to edit letters and articles without changing their meaning in order to suit legal and space requirements.

**Subscriptions:** Annual subscriptions are offered to members of associations according to their membership enrollment as follows: 100-500 members/\$80; 501-5,000/\$71; 5,001-20,000/\$33.40; over 20,000/\$11.50. Individual subscriptions are available at the following rates: \$89.95 per year (12 issues) in the United States or Puerto Rico; \$109 per year in all other countries. Airmail postage is an additional \$94 per year. Single copies, current and back issues, if available, are \$10. Write *AARC Times*, Daedalus Enterprises, Inc., 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706. Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Daedalus Enterprises, Inc., for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$1 is paid directly to CCC, 21 Congress St., Salem, MA 01970.

# INSPIRE YOUR PATIENTS

*Introducing the palm-sized, wearable Breathe Non-Invasive OPEN Ventilation (NIOV™) System. Designed to increase mobility and promote early mobilization.*

The Breathe NIOV System — developed to ventilate patients with respiratory insufficiency. Opening the possibility to expand their daily activities at home, during pulmonary rehabilitation or to promote early mobilization while in the hospital.

- Wearable, one pound, battery-operated ventilator
- Delivers ventilation and supplemental oxygen\*
- Unique OPEN nasal pillow interface
- Clinician customizable volume settings



**Breathe**  
NIOV™

1-877-698-1325 [www.BreatheNIOV.com](http://www.BreatheNIOV.com)

PM-00-0009-C ©2012. NIOV is a trademark of Breathe Technologies, Inc.

\*An external source of oxygen is required.



# Coming of Age

## Common Comorbidities, Complications, and Consequences in the Elderly

by Helen M. Sorenson, MA, RRT, FAARC

*“Everyone desires to live long, but no one would be old.”*  
– Jonathan Swift: 1667–1745

I am quite sure that most have seen or heard the slogan, “Getting older ain’t for sissies.” While there are many joys in old age — among them retirement, time to travel, time to pursue interests, and watching grandchildren grow up — there are also health challenges that can result in unexpected complications. Diseases/disorders that coexist in an individual are termed comorbidities. These are not exclusive to the elderly. It is not uncommon for asthmatic children to wear corrective lenses/eye glasses. Young adults with scoliosis may also suffer with allergies. The elderly however, by virtue of age-related changes in physiology, metabolism, and immunity, are at increased risk for developing multiple coexisting diseases and/or disorders. Simply listing the most common comorbidities in the elderly would be like saying: “There once was a little girl named Cinderella, and she lived happily ever after.” In both cases, the rest of the story is missing. It is not just the presence of comorbidities in the elderly but rather the complications and consequences that respiratory therapists need to be concerned about.

### The changing face of the elderly

Old age, according to our government, begins at age 65. With improved health and functional status of older adults today, “old age” may need to be reevaluated. A recently published longitudinal cohort study (1990–2010) of 1,861 individuals born between 1920 and 1921 revealed the following: At age 70, the cohort had good health, low comorbidities, preserved cognition, and basic and instrumental activities of daily living (ADLs and

IADLs). At age 78, comorbidities increased, cognitive status declined, and depression and difficulty with ADLs were noted. By age 85, comorbidities had tripled and all other geriatric syndromes (depression, hearing/visual impairment, falls, dizziness, and impaired mobility) had doubled.<sup>1</sup> As respiratory therapists, we see and treat all of these cohorts, so understanding the prevalence of comorbidities is extremely important.

### Common comorbidities

Depending on the source referenced, the list of comorbidities in the elderly varies slightly. Few respiratory care or aging textbooks address comorbidity, even to define it. Chronic care services are a hallmark of geriatric care,<sup>2</sup> and chronic care usually involves treating many co-existing diseases or comorbidities. Commonly listed as comorbidities are: cardiovascular disease (past myocardial infarction, cardiac or pulmonary hypertension, congestive heart failure, atrial or ventricular dysrhythmias, aortic or mitral valve dysfunction), diabetes, renal disease, pulmonary disease (asthma, emphysema, chronic bronchitis, COPD), urinary tract infection, depression, osteoporosis, gastroesophageal reflux disease, and osteoarthritis. Add to this age-related vision and hearing deficits (presbyopia and presbycusis) and it is easy to see why polypharmacy — the use of multiple medications — is also a confounding problem. To address each of these comorbidities individually

would be impossible in the limited space of this article. Rather, discussing the potential consequences and complications in different situations will shed light on why comorbidities are important to all health care professionals.

### about the author...



Helen M. Sorenson, MA, RRT, FAARC, is an associate professor with the department of respiratory care at the University of Texas Health Science Center at San Antonio, TX.

### Perioperative assessment of elderly with comorbidities

About 50% of adults over age 65 will undergo surgery at some point. The most common surgical procedures in the elderly include: joint replacement, internal fixation for hip fracture reduction, heart valve replacement, cholecystectomy, and revascularization procedures (cardiac by-pass grafting). Unless advance planning is done perioperatively (including pre-, intra-, and post-operative periods), the risk for adverse outcomes is increased. Older adults have diminished ability to maintain or recover homeostasis during surgical procedures.<sup>3</sup> Elders with comorbidities undergoing surgery will need to have a comprehensive assessment done. Determination of pre-operative comorbidities can drive the post-operative care. When surgery is elective, comorbidities — not age — can be the deciding factor in whether or not to perform surgery. Post operatively, older adults may require a longer recovery time, early mobilization, proper use of a urine catheter, prevention and/or management of delirium, analgesic agents, and the use of anticoagulants. Fast-track extubation may not be advisable until the patient is fully awake and the anesthesia agents have cleared their system. Also, strict handwashing around the elderly patient should be enforced.

### Older adults with hip fractures and comorbidities

Nursing home residents who sustain hip fractures have an increased risk of post-fracture complications. In 2008, a retrospective cohort study of 195 nursing home residents with a hip fracture was conducted. Pre-fracture characteristics including age, gender, cognition, functional status, comorbidities, hospital complications, and six-month (post-operative) complications were evaluated as potential predictors of mortality. Taking all these factors into consideration, mortality was 70% greater among residents with a pressure ulcer or pneumonia within six months of the hip fracture.<sup>4</sup> Pressure ulcers and pneumonia are preventable comorbidities. Strategies to prevent or reduce their incidence should be mandated in all health care institutions. Early performance of hip fracture surgery (within 24 hours of admission) has not been shown to lower mortality but does appear to improve the overall outcome.<sup>5</sup>

### Care of ALS patients with comorbidities

Amyotrophic lateral sclerosis (ALS) is a progressive, heterogeneous, neurodegenerative, and restrictive pulmonary disease that is fatal. While not a specific disease of aging, the highest incidence is in those 60–69 years of age.<sup>6</sup> ALS, however, is not the only diagnosis in some pa-

tients. Pulmonary and cardiovascular disease may be underlying comorbidities that will impact care provided by respiratory therapists. When an ALS patient has COPD (diagnosed or suspected), if noninvasive positive pressure ventilation (NPPV) is initiated, the inspiratory time, I:E ratio, and rise time will need to be adjusted depending on the degree of air trapping and airway compromise.<sup>7</sup> Assessment of vital signs and response to exertion in an ALS patient will be impacted if the patient has coexisting cardiac or pulmonary hypertension, congestive heart failure, atrial or ventricular dysrhythmias, or a pacing device. Assessing ALS patients accurately is important to distinguish new symptoms from pre-existing ones.<sup>7</sup> ALS patients who are immobile, have lower extremity weakness, or are confined to a wheelchair are at risk for development of deep vein thrombosis and potential pulmonary emboli. In this patient population, comorbidities need to be taken seriously and care adjusted accordingly.

### COPD complexities

COPD has been described as *being* a comorbidity in older adults with community-acquired pneumonia and



cancer. COPD has also been described as *having* its own chronic comorbidities, in particular: cachexia, skeletal muscle abnormalities, hypertension, diabetes, coronary artery disease, heart failure, pulmonary infections, cancer, and pulmonary vascular disease.<sup>8</sup>

The complex nature of COPD in older adults has been studied for many years. There is now increasing evidence that COPD is a systemic disease, not just a disease of the lungs. Myocardial infarction and stroke are the most common COPD comorbidities, but lung cancer is also prevalent.<sup>9</sup> Other comorbidities mentioned by Feary et al in a 2010 *Thorax* article are osteoporosis, skeletal muscle loss, weakness, weight loss, depression, and metabolic syndrome.<sup>9</sup>

Cigarette smoking is a major risk factor for all chronic diseases, including COPD and cancer. Smoking has also been implicated in causing systemic inflammation, which can lead to chronic heart failure, metabolic syndrome, and other comorbidities.<sup>8</sup> In addition to smoking, obesity is a major risk factor for comorbidities. Obesity by itself may have a negative effect on lung function. Its relationship with COPD has not been thoroughly investigated and is of yet unclear, but it is thought that the two risk factors may interact synergistically since they are both associated with increased comorbidities.<sup>10</sup> Once diagnosed with COPD, patients need to have follow-up screening tests to determine what undiagnosed comorbidities they may yet be dealing with. Treating COPD patients with comorbidities is a challenge. The complexity of care increases exponentially with the number of comorbidities. Physicians from different disciplines may need to be consulted, coordinated care must be established, and COPD patients need to be aware that their medication regimens should be followed carefully.

### Comorbidities and cancer

Patients with cancer often have comorbidities, many categorized as cardiopulmonary disorders. Being older and having cancer puts individuals at an even higher risk of developing comorbidities. The prevalence of COPD in patients with cancer is increased, estimated to affect as many as 40%–70% of those diagnosed with lung cancer.<sup>10</sup> This becomes a patient safety issue when multiple providers are prescribing medications. In 2007, patients attending an outpatient oncology clinic were surveyed about their medication use. From the data collected, it was determined that 27% of the patients had the potential for serious adverse drug events. The drugs involved were not the anti-cancer agents but rather the drugs prescribed for the comorbidities.<sup>11</sup> Cancer treatment decisions and therapy for pre-existing health conditions

should be preceded by a collaborative discussion between clinicians. Patients and families, to some extent, bear the responsibility of disclosure if comorbidities unknown to the specialist are present. Family members also need to be aware of the potential for adverse drug reactions when multiple medications are prescribed. A heightened awareness by all involved may forestall the adverse consequences of drug-drug interactions.

### Clinical practice guidelines and comorbidities

Clinical practice guidelines (CPGs) have been defined as “systematically developed statements to assist practitioners and patients’ decisions about appropriate health care for specific clinical circumstances.”<sup>12</sup> The AARC has been a leader in the development of respiratory-related CPGs for the past two decades. CPGs, however, are designed to be disease specific. Disease-specific CPGs do not address the fact that a patient with cancer may also have COPD and diabetes and rheumatoid arthritis. Additionally, when the patient with COPD and comorbidities is elderly, CPGs may not address either the aging aspect or comorbidities. To make CPGs more patient-centered rather than disease-oriented, guidelines need to be developed that take all these factors into consideration.

### Dealing with patients with comorbidities

The aging population is rapidly growing. Older patients are being seen in increasing numbers in hospitals, emergency rooms, and clinics. An awareness of primary disease management plus accompanying comorbidity management will become more important with each passing year. Respiratory therapists deal with patients on a daily basis who fit this demographic. It is important that our respiratory therapists see beyond the COPD patient and consider all the other comorbid factors. Conversations with nurses and physicians may be helpful. An awareness of potential complications precipitated by multiple medications in many cases may be the best preventive strategy. Patient assessment that includes more than just vital signs and auscultation may be necessary. Looking for clubbing, checking for dehydration, listening for abnormal heart sounds, especially in the elderly population may be clues to underlying disease. Understanding and accommodating for comorbidities and actively screening for undiagnosed comorbidities will result in better patient care and, ultimately, more satisfied RTs.

Recent research is looking at preventive strategies to reduce the burden of comorbidities. Exercise has long been touted as a cure for what ails us, but now there appears to be evidence. Exercise in patients with chronic inflammatory disorders such as rheumatoid arthritis and

COPD may lower the levels of systemic inflammatory markers such as C-reactive protein (CRP) and interleukin (IL) 6.<sup>13</sup> It has also been noted that aerobic exercise diminishes pulmonary injury induced by cigarette smoke exposure.<sup>14</sup> More research needs to be done in the areas of preventive strategies. By reducing the number of potential comorbidities, the rate of disease-associated morbidity and mortality in our elderly will be lessened. ■

#### REFERENCES

- Jacobs JM, Maaravi Y, Cohen A, et al. Changing profile of health and function from age 70 to 85 years. *Gerontology* 2012 [Epub ahead of print].
- AGS/ADGAP Policy Statement. Geriatric medicine: a clinical imperative for an aging population, Part II. *Ann Longterm Care* 2005; 13(4):42-46.
- Setiati S. Perioperative assessment and management of the elderly. *Acta Med Indones* 2007; 39(4):194-201.
- Berry SD, Samelson EJ, Bordes M, et al. Survival of aged nursing home residents with hip fracture. *J Gerontol A Biol Sci Med Sci* 2009; 64(7):771-777.
- Palmer RM. Perioperative care of the elderly patient: an update. *Cleve Clin J Med* 2009; 76(Suppl 4):S16-S20.
- Armon C. Epidemiology of amyotrophic lateral sclerosis/motor neuron disease. In: Shaw PJ, Strong MJ, editors. *Motor neuron disorders*. Philadelphia: Butterworth & Heinemann; 2003:167-206.
- Guion L. *Respiratory management of ALS: amyotrophic lateral sclerosis*. Sudbury MA: Jones and Bartlett Publishers; 2010.
- Fabbri LM, Luppi F, Beghé B, Rabe KF. Complex chronic comorbidities of COPD. *Eur Respir J* 2008; 31(1):204-212.
- Feary JR, Rodrigues LC, Smith CJ, et al. Prevalence of major comorbidities in subjects with COPD and incidence of myocardial infarction and stroke. *Thorax* 2010; 65(11):956-962.
- Young RP, Hopkins RJ, Christmas T. COPD prevalence is increased in lung cancer, independent of age, sex and smoking history. *Eur Respir J* 2009; 34(2):380-386.
- Reichelmann RP, Tannock IF, Wang L, et al. Potential drug interactions with duplicate prescriptions among cancer patients. *J Natl Cancer Inst* 2007; 99(8):592-600.
- Mutasingwa DR, Ge H, Upshur RE. How applicable are clinical practice guidelines to elderly patients with comorbidities? *Can Fam Physician* 2011; 57(7):e253-e262.
- Nader GA, Lundberg IE. Exercise as an inflammatory intervention to combat inflammatory diseases of muscle. *Curr Opin Rheumatol* 2009; 21(6):599-603.
- Toledo AC, Magalhaes RM, Hizume DC, et al. Aerobic exercise attenuates pulmonary injury induced by exposure to cigarette smoke. *Eur Respir J* 2012; 39(2):254-264.



## Educate. Manage. Lead.

Earn your Master of Science in Respiratory Care Leadership.

Created for practicing respiratory therapists, the **Master of Science in Respiratory Care Leadership** presents an action-learning approach that builds leadership competencies and advances your clinical knowledge. Core courses cover topics such as advanced cardiopulmonary physiology and research design. In addition, you may focus your studies in one of six areas:

- Adult and Organizational Learning
- Clinical Trial Design
- Health Management
- Higher Education Administration
- Nonprofit Management
- Regulatory Affairs

### Interested in learning more?

Visit [www.northeastern.edu/cps/respiratory](http://www.northeastern.edu/cps/respiratory) or call 1.877.668.7727



Northeastern University  
College of Professional Studies

- 100% Online
- Rolling Admissions
- Multiple Start Dates

## Low-Literacy Patient Education and Its Effect on Adherence to the Care Plan

by William F. Galvin, MEd, RRT, FAARC, and Allison Iaccarino, AS, CRT

*You enter the room of a 48-year-old patient with asthma intending to provide a patient education session that is to entail a comprehensive overview of the basic anatomy of the lung (specific identification of the region of the bronchospasm and airway inflammation), the environmental factors that trigger asthma (dust, mold, and animal dander from the family cat), the correct procedure to follow when monitoring his peak flows (the traditional green-normal, yellow-caution, and red-danger zones), and the steps to follow when using his metered-dose inhaler (small canister of albuterol). Prior to entering the room you review the patient's chart and receive conflicting and puzzling commentary from the nurse's notes — some reflecting a seemingly pleasant man of Spanish ancestry who appears willing but not always able to participate effectively in his care and others reflecting a seemingly distant, withdrawn, and recalcitrant man who has chosen not to comply or conform to his treatment plan. Puzzled, you enter the patient's room armed and equipped with an arsenal of teaching aids — the textual pamphlet developed by the AARC entitled "A Patient's Guide to Aerosol Drug Delivery," explaining the structure and function of the lung; pictures and graphic illustrations of the various devices; and short video clips depicting and demonstrating a detailed account of correct procedures. You are determined to teach the patient about his condition, but 45 minutes later you leave the patient's room confused and frustrated that the patient was unable to understand and/or perform simple procedures to care for his asthma. What is going on with this patient? Why is he unable to master some fairly basic information? Why is he unable to perform simple maneuvers?*

There are many potential reasons for this patient's inability to learn what seemingly are a set of simple tasks.

Among them are the issues of compliance and adherence to the care plan and the often overlooked and yet menacing issue of low health literacy. This article will begin with an explanation of the subtle differences and distinction between the concepts of compliance and adherence. It will transition to the theme of low health literacy

and specifically provide a definition of the term; a brief account of the magnitude, severity and complexity of the health literacy problem; identification of the high-risk groups, signs, observations or behaviors indicating low health literacy; and teaching strategies for patients with low health literacy.

### about the authors...



William F. Galvin, MEd, RRT, FAARC, is assistant professor in the School of Allied Health Professions and program director of the respiratory care program at Gwynedd-Mercy College in Gwynedd Valley, PA.

Allison Iaccarino, AS, CRT, is a graduate of the Associate of Science Respiratory Care Degree Program and presently a junior in the Bachelor of Health Sciences Degree Program at Gwynedd-Mercy College in Gwynedd Valley, PA.

### Are we talking about non-compliance or non-adherence?

While many respiratory therapists consider the terms compliance and adherence to be synonymous, there is, in fact, a significant difference. Compliance entails or implies obedience or passive acceptance of the health care regimen. It can have an authoritative undertone implying that the RT is viewed as the authority figure and the patient the submissive recipient of the education or treatment. Its converse, non-compliance, can be highly judgmental and associated with critical terms, such as an uncooperative, non-conforming, or disobedient patient. Additionally, the patient/provider encounter will often lack a participative relationship and preclude the highly desirable concept of forming a partnership (alluded to in the literature as concordance), where equality and collaboration occur in the decision-making process. In contrast, adherence implies support of, or commitment to, a plan of care. It presumes

support of, or commitment to, a plan of care. It presumes

# It's about time.

The new Onyx® Vantage finger pulse oximeter.

Accuracy you can act on™.

With all of the different patients you see in a day, do you really have time for second guessing?

When it comes to finger pulse oximetry, accuracy does matter. That's because accurate data empowers you to make faster, more informed decisions. Decisions that can lead better outcomes for your patients. And improved productivity and job satisfaction for you.

Onyx is the only pulse oximeter brand with scientifically proven accuracy in the widest range of patients. From pediatric to adult. With good to low perfusion.

**The Onyx Vantage 9590 —  
Accurate data for actionable  
decision making.**



**Isn't it about time  
you owned an Onyx?**

**NONIN**

For more information on the Onyx Vantage 9590, visit [www.onyxvantage.com](http://www.onyxvantage.com)

For Hospital Purchases, please contact your supplier or one of the authorized distributors below. Use Keyword: Onyx Vantage.

 **Tri-anim**  
800-TRI-ANIM (874-2646)

 **JORDAN RESES**  
Veteran Administration Hospitals  
 Your Premier Respiratory Supply Company  
800-541-2071

the patient's agreement with the recommendations. Its converse, non-adherence, can be intentional or unintentional and as such can be affected by social support, financial constraints, or cognitive function.<sup>1,2</sup> Regardless of the terminology, the root cause can entail a myriad of complex factors; and the one that most likely applies to our scenario is low health literacy.

### Health literacy defined

Health literacy is defined as the ability to obtain, process, and understand basic health information and services needed to make appropriate health care decisions and follow instructions for treatment.<sup>3</sup> In a landmark report released by the federal government entitled "Adult Literacy in the United States," approximately 90 million Americans (or almost 50% of people surveyed) were either marginally or functionally illiterate.<sup>4</sup> The 2002 sequel was equally alarming and identified 36% of those surveyed at the basic or below basic level. Subsequent reports and publications by the American Medical Association (AMA), the National Institutes of Health, and The Joint Commission substantiated the extent and magnitude of the health literacy problem. Perhaps one of the most profound and compelling statements related to health literacy was expressed in a white paper entitled "What Did the Doctor Say? Improving Health Literacy to Protect Patient Safety" in which the then president of The Joint Commission called health literacy "a silent epidemic." The severity of the health literacy problem in the U.S. health care system is quite significant — largely unknown and undetected by clinicians. Health literacy includes prose, document, and quantitative literacy and entails reading and understanding text as well as having numeracy skills. Practical examples include understanding medical terminology, learning how to monitor asthma symptoms, administering inhaled medications, identifying and avoiding triggers, measuring medications, and reading peak flow values. Additionally, it would include selecting the appropriate health insurance plans or drug coverage and calculating premiums, copays, and deductibles.

### Patient populations at risk for low health literacy

While the patient population at risk for low health literacy is highly variable, the literature identifies the more likely target groups to be older adults, racial and ethnic minorities, people with less than a high school degree or General Educational Development (GED) certificate, people with low income levels, non-native speakers of English, and people with compromised health status.<sup>5</sup>

### Recognizing low health literacy

Identifying health illiteracy is not easy. Most patients have been hiding their condition for years. In some cases close friends and even family members may be unaware of the condition. There are no stereotypical signs; however, patients will often employ a variety of strategies to mask or camouflage their condition or inadequacies. Common subtle behaviors include reacting to complex learning situations by withdrawing, being evasive, nervous, confused, or even angry; making excuses such as not having their reading glasses or being too busy, too tired, or too sick; postponing learning until another family member is present; returning incomplete registration forms or medical surveys or not attempting them at all; and demonstrating excessive frustration and difficulty with reading, listening, and even following simple instructions, to name but a few.<sup>1</sup> Numerous tests are available to assess health literacy. Among the more common are REALM (Rapid Estimate of Adult Literacy in Medicine), TOFHLA (Test of Functional Health Literacy in Adults) and the Cloze procedure, which are geared to measuring reading skills and comprehension.<sup>1</sup>

### Strategies for patients with low literacy

While there is no simple formula to treat low health literacy, there are a number of highly successful strategies to address and mitigate the problem. One is a collection of teaching strategies proposed by numerous authors and assembled by Bastable et al;<sup>1</sup> a second is a six-step process addressed by the AMA in a publication entitled, *Health Literacy: A Manual for Clinicians*; and a third is the use of a photonovela. An abbreviated account of each will follow.

Bastable and colleagues suggest the following tips as useful strategies to employ: establishing trust prior to engaging in the teaching/learning process; using the smallest amount of information possible to accomplish goals/objectives; making points of information as vivid and explicit as possible; teaching one step at a time; using multiple teaching methods and tools; allowing patients to restate information in their own words and demonstrate procedure (teach back); keeping motivation high; building in coordination of procedures; and using repetition to reinforce.<sup>1</sup>

The AMA also provides a set of interventions entailing: slowing down, using plain language, showing or drawing pictures, limiting information, using teach-back or return demonstration, and creating a shame-free environment.<sup>6</sup>

The use of a photonovela is a relatively new and novel idea. It is a health education item formatted like a comic book but containing photographs instead of drawings

### Strategies for Patients with Low Health Literacy

- Establish trust prior to engaging in the teaching/learning process.
- Use the smallest amount of information possible to accomplish goals/objectives.
- Make points of information as vivid and explicit as possible.
- Teach one step at a time.
- Use multiple teaching methods and tools.
- Allow patients to restate information in their own words and demonstrate the procedure (teach back).
- Keep motivation high.
- Build in coordination of procedures.
- Use repetition to reinforce.

REFERENCE: Derived from Bastable SB. Health professional educator: principles of teaching and learning. Sudbury MA: Jones and Bartlett Learning; 2011:200-201.

combined with small dialogue bubbles. It is easy to read, tells a story, and stimulates discussion with patients who struggle with low literacy levels.<sup>7</sup>

#### Take-home points

If we return to our opening paragraphs and analyze the details depicted in the scenario, it appears that our 48-year-old patient with asthma most likely exhibited elements of both non-compliance and non-adherence. The information provided in the patient's chart (his profile as pleasant, Spanish ancestry, willing but not always able to participate) speaks to the issue on non-adherence. On the other hand, his seemingly distant, withdrawn, and recalcitrant behavior reflects non-compliance. It should be apparent the patient reflects a willingness or agreement to participate (adherence) and in the latter case a reluctance, unwillingness, or disobedience (non-compliance). Only when respiratory therapists visit patients at the bedside armed with a variety of traditional teaching tools and strategies do they experience the real issues of limited or low health literacy. If RTs were able to perform a quick literacy assessment (via the REALM or TOFHLA) or perceive some of the previously cited behaviors or observations noted by Bastable et al, they would definitely determine the problem of low literacy. Armed with the assessment, the RT would be better prepared to institute appropriate teaching strategies or techniques to care for the patient.

The final take-home point for the respiratory therapist providing patient education at the bedside is the need for careful observation, scrutiny, and vigilance in identifying the low health literacy patient. As previously noted, low health literacy has been labeled as a "silent epidemic." This label is testimony to its severity. It should be apparent that the RT functioning at the front lines of care is positioned to not only identify the problem but effectively intervene in caring for the patient. ■

#### REFERENCES

1. Bastable SB. Health professional educator: principles of teaching and learning. Sudbury MA: Jones and Bartlett Learning; 2011:200-201.
2. Muma RD. Patient education: a practical approach. Stamford CT: McGraw-Hill/Appleton & Lange; 1997:41-42.
3. Committee on Health Literacy, Institute of Medicine of the National Academies. Nielsen-Bohman L, Panzer AM, Kindig DA, editors. Health literacy: a prescription to end confusion. Washington DC: The National Academies Press; 2004.
4. Kirsch I, Jungeblut A, Jenkins A. Adult literacy in America: a first look at the results of the National Adult Literacy Survey (NALS). Washington DC: National Center for Educational Statistics, U.S. Department of Education; September 1993.
5. National Center for Education Statistics. Kutner M, Greenberg E, Jin Y, Paulsen C. The health literacy of America's adults: results from the 2003 National Assessment of Adult Literacy. Washington DC: U.S. Department of Education; 2006.
6. Weiss B. Health literacy: a manual for clinicians. American Medical Association Foundation and American Medical Association, 2003.
7. The Online Journal of Issues in Nursing (OJIN) website. Cornett S. Assessing and addressing health literacy. Available at: [www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No3Sept09/Assessing-Health-Literacy-.html](http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No3Sept09/Assessing-Health-Literacy-.html) Accessed March 8, 2012

## Wear AARC!

The AARC Logo projects your professional image at work, presentations, meetings or any time.

**AARC Logo Charm**  
ITEM GT0062C  
Nonmember Price \$6.75  
Member Price \$4.75

**AARC Logo Lapel Pin**  
ITEM GT0062L  
Nonmember Price \$6.75  
Member Price \$4.75

MEMBERS SAVE \$2

**Respiratory Care Week**  
October 21–27, 2012  
[www.AARC.org/store.cfm](http://www.AARC.org/store.cfm)

**AARC The Respiratory Catalog**  
[www.AARC.org/store.cfm](http://www.AARC.org/store.cfm)

# Best Practices in the Sleep Lab

According to the Centers for Disease Control and Prevention, an estimated 50–70 million adults in the United States have a sleep or wakefulness disorder. When you consider the U.S. population is about 310 million, it's easy to see that sleep problems are among the most common health concerns in the country; and the growth we've seen in sleep diagnostics and testing over the past couple of decades reflects that fact.

As with anything that grows at an accelerated pace, sleep labs have had to scramble to ensure they are operating under best practices in the industry. Last November, AARC member Tony Stigall, MBA, RRT, RPSGT, president of Space Coast Sleep Disorders Center in Melbourne, FL, outlined some of those best practices during a lecture at AARC Congress 2011, the 57th International Respiratory Convention and Exhibition in Tampa, FL.

### Meet rules and regulations

Stigall says the process starts with making sure your lab meets all of the pertinent federal regulations. You also need to recognize that those regulations can vary depending on the state where your sleep center is located. He recommends a visit to [www.cms.gov](http://www.cms.gov) to find National Coverage Determinations and Local Coverage Determinations that may impact the provision of sleep diagnostics and testing for Medicare patients in your state. Repeat visits are also prudent to keep track of any changes, which can be frequent in this area.

He also emphasizes the importance of knowing and understanding the qualifying guidelines before treating individual patients, as factors qualifying patients for certain services can vary, too. "You need to know the guidelines and follow them from the very beginning, because if the patient doesn't meet the guidelines, then your services won't be reimbursed for the device you put them on, whether it's CPAP, bi-level PAP, etc."

Regulations can extend past the federal level to the state, county, and even city level as well. Some states, for example, require sleep labs to be licensed, and permits and technician requirements also run the gamut.

### Get accredited

Accreditation is another area to consider. "This is important because it validates quality care to the community; provides recognition from insurers, associations, and third parties; meets licensure requirements in many states; and may improve access to liability insurance or reduce the cost," says Stigall. For example, even though his state of Florida doesn't require accreditation for sleep labs, Blue Cross in Florida does require accreditation for sleep labs treating their beneficiaries.

Stigall says there are several entities accrediting sleep labs, but the majority of the market is covered by The Joint Commission and the American Academy of Sleep Medicine (AASM). There are significant differences between the two accrediting bodies. The Joint Commission accreditation term is three years, and an unannounced resurvey can occur within 18–36 months of the original survey. Sleep lab medical directors are not required to be board certified or board eligible in a sleep specialty, and staff members do not need to be registered in sleep technology.

AASM accreditation is bestowed for a term of five years, and the organization will also accredit sleep centers that provide durable medical equipment services and out-of-center sleep testing for adults. Medical directors must be board certified or board eligible in sleep, and at least one sleep technician on staff must be registered or accepted to sit for registry by the American Board of Sleep Medicine, National Board for Respiratory Care, Board of Registered Polysomnographic Technologists, or an equivalent exam accepted by the AASM.

### Quality assurance counts

Accreditation can go a long way to ensure quality services in a sleep lab, but Stigall says that following best practices also requires labs to perform quality assurance on their own. "Quality assurance is the systematic monitoring and evaluation of the various aspects of a project, service, or facility to maximize the probability that minimum standards of quality are being attained by the production process," he says.

What kinds of things can a sleep lab measure? Stigall suggests focusing on patient satisfaction, timeliness in scoring studies and dictating reports, and interscorer reliability. “Patient satisfaction is probably one of the most important things we look at,” he says. “If patients are not happy, they will let you know in that survey.” Keeping patients happy and safe requires attention to detail. Things like cleanliness of the facility and friendliness of the scheduling staff and technicians play a big role in whether your patients will provide positive or negative feedback to their physicians and friends when they report on their sleep lab experience.

Regarding the timeliness of scoring and reporting, Stigall says diligence is also key. If you send studies out to be scored, keep track of their progress because the faster you can get the report to the physician, the faster you can get the patient back into the lab for treatment. When dealing with multiple physicians who dictate the reports, let them know there are consequences for a slow response. “Have a policy that permits your medical director to step in and take over if a physician doesn’t get it done within a week.”

Measuring interscorer reliability can help ensure consistency in your services across the board. “Grade your scorers against the medical director, who is the gold standard, and see how close you are to that,” recommends the therapist. He notes all the sleep software allows for this function, and measuring interscorer reliability is a great way to help your sleep technicians continually improve on their scoring skills.

### Other factors to consider

Finding effective ways to market your services, manage your supplies and patient flow, and add innovative technology can also factor into your sleep lab’s success or failure.

While having a marketing representative to call on local physicians and tout your services is certainly a plus, Stigall says marketing can still be accomplished even if you just use your regular staff. “Scheduling personnel and office staff can get involved because they talk to the referring physicians’ offices every day,” he says. These personnel can market the lab simply by making sure they provide timely and accurate information to the physicians’ offices and by being pleasant and helpful during the process.

Sleep practitioners are crucial to any marketing effort as well, because they represent your sleep lab to the patient who comes in for testing, so they really need to be engaged. “If they are unprofessional or rude to your patients, it will affect

the quality of your services, it will get back to your referring physicians, and you will lose business because of it.”

Managing supplies is simply a matter of ensuring you don’t purchase, or use, more than you really need. Stigall says his lab ended up saving a considerable sum by instituting a system to ration supplies to the sleep practitioners each night. Giving them only the supplies they needed to get the job done cut down on waste for things like paste and prep.

Managing patient flow requires diligence on the part of the scheduling staff. Staff should be trained to verify the patient’s insurance before they come into the lab, and they should also let patients know that their co-pay will be an up-front cost so they can budget for that amount prior to their appointment. Keeping a cancellation list and asking people if they would like to be on standby for a cancellation can help as well. “We average over 100 studies a month and generally have several patients who cancel their appointment at the last minute or do not show up at all. By instituting a standby/cancellation list, we are able to identify a group of patients who want to get in as soon as possible who will come in with little or no notice,” says Stigall.

### Juggling everything successfully

Running a sleep lab requires careful attention to best practices in many areas, and the manager who invests the time and energy necessary to keep all of these things in play has the best chance of offering a high-quality, successful service to the community. By focusing on regulations, accreditation, quality assurance, marketing, supplies, patient flow, and new technology, sleep labs can ensure that more of the 50–70 million Americans with sleep and wakefulness disorders get the excellent care they need and deserve. ■



## Ventilation Studies of Note

**T**hese significant studies on mechanical ventilation have been published in peer-reviewed journals over the past few months.

### Streamlined definition for VAP

Harvard researchers have developed a streamlined version of the Centers for Disease Control and Prevention's definition of ventilator-associated pneumonia (VAP) that they believe could be more useful in clinical practice. The investigators replaced qualitative criteria in the original definition with quantitative criteria and used changes in ventilator settings to screen for worsening oxygenation. The streamlined definition was retrospectively compared with the conventional definition in three university hospitals.

The researchers found the streamlined definition was significantly faster to apply, at a mean of 3.5 minutes versus 39.0 minutes. It was also just as effective in predicting increases in ventilator days, ICU days, and hospital mortality. The conventional definition was slightly better at predicting hospital days. The authors conclude, "VAP surveillance using the streamlined method may facilitate more objective and efficient quality assessment for ventilated patients." The study appeared in the February issue of *Clinical Infectious Diseases*.

### Longer CMV breath inspiratory time linked to greater inflammation

A new study out of Australia set out to determine if conventional mechanical ventilator (CMV) breath duration delivered during high-frequency jet ventilation (HFJV) has an impact on gas exchange, lung mechanics, and lung injury. Eight newly born preterm lambs received HFJV plus a CMV breath inspiratory time of 0.5 seconds. Eight others received HFJV plus a CMV breath inspiratory time of 2.0 seconds. All were ventilated over a two-hour period and compared to age-matched unventilated controls.

CMV breath duration did not alter blood gas exchange, ventilation parameters, *ex vivo* static lung mechanics, or markers of lung injury. However, consistent trends toward elevated inflammatory markers were seen with the

longer CMV breath inspiratory time, suggesting a greater risk for injury with the longer time. The study was published ahead of print in *Neonatology* on Jan. 14.

### HFOV may reduce oxidative damage

Oxidative damage has been implicated in pulmonary injury leading to the development of acute respiratory distress syndrome. Researchers from Tufts University find high-frequency oscillatory ventilation (HFOV) may reduce this oxidative damage when compared to conventional mechanical ventilation (CMV). Their study was conducted in rabbits in which lung injury was induced by tracheal saline infusion. Alkaline single cell gel electrophoresis (comet assay) was used to determine DNA damage, and total antioxidant performance (TAP) assay was used to measure overall antioxidant performance in plasma and lung tissue. The HFOV and CMV rabbits were compared to healthy controls.

Rabbits ventilated with HFOV had significantly higher antioxidant performance and lower DNA damage than those ventilated with CMV, with their results similar to those seen in the healthy controls. The authors believe these findings indicate that antioxidant performance analyzed by TAP, and oxidative DNA damage analyzed by comet assay, warrant further studies in humans. The research was published ahead of print by the *Journal of Applied Physiology* on Feb. 2.

### Applied conditions govern relative effects of negative vs. positive pressure ventilation

Negative and positive pressure ventilation do not result in major biological differences when waveforms and lung volume history are matched. That's the take-home message from Canadian researchers who looked at these issues in four animal studies. The first two involved *ex vivo* and *in vivo* analysis of negative and positive pressure ventilation in mouse lungs. The third looked at sustained static-equivalent positive versus negative pressure ventilation in surfactant-depleted rabbits. The fourth examined positive versus negative ventilation with identical pressure-time characteristics in surfactant-depleted anesthetized rabbits with identical volume histories.

In the first two studies, matched positive and negative pressure time profiles resulted in identical tidal volumes. Similar PaO<sub>2</sub> and end expiratory lung volumes were noted in the second study, and no difference in oxygenation or lung volumes was seen in the third. The research was published ahead of print in *Intensive Care Medicine* on Feb. 18.

**nHFOV depends on amplitude and inspiratory time**

Italian investigators took a closer look at the delivery of high-frequency oscillatory ventilation through nasal prongs (nHFOV) in a bench model of nHFOV built by connecting SM3100A tubings to a neonatal lung model. Smaller and larger binasal prongs were used, along with a circuit with no prongs that served as a control. Tidal volume, the oscillatory pressure ratio, and ventilation were measured across a range of amplitudes and inspiratory

times. Overall, changing oscillation amplitude and inspiratory times had a significant effect on ventilation in this study, leading the authors to conclude that varying inspiratory times and the oscillatory pressure ratio provides a theoretical tidal volume within the ideal values for HFOV even when using the smallest nasal prongs. The study was published ahead of print by *Pediatric Pulmonology* on Feb. 10.

**Below horizontal placement of trachea prevents VAP**

Positioning the trachea and tracheal tube below the horizontal may prevent the development of VAP. Researchers from the National Heart, Lung, and Blood Institute arrived at that conclusion after studying trachea orientation and VAP in 26 mini-pigs that were divided into four groups. In group A, the trachea was placed 45° above horizontal for 72 hours. The trachea was placed 10° below



The birth of a new era.

**Babylog® VN500 – Dedicated to neonatal ventilation**

The Babylog® VN500 puts technology to work for you so you can maintain focus on the special needs of your fragile and tiny patient. Designed with the baby in mind, the Babylog® VN500 offers additional features such as volume ventilation and effective leakage compensation. Trending and graphical data depictions make bedside interpretation meaningful and easy to understand. A variety of configurable options exist to tailor to your requirements and optimize your workflow.

VISIT OUR WEBSITE AT [WWW.DRAEGER.COM/RESPIRATORYCARE](http://WWW.DRAEGER.COM/RESPIRATORYCARE) OR CALL 1-800-437-2437

Dräger. Technology for Life®

D-221386-2009

horizontal in the other three groups, with group B being ventilated for 72 hours, group C for 72 hours with enteral feeding, and group D for 168 hours with enteral feeding.

Following the study, all the animals were sacrificed so that a clinical diagnosis of VAP could be made. All of the pigs with the trachea placed above horizontal developed VAP and respiratory failure, compared to none of those with the trachea placed below horizontal. Among the below horizontal group, 16 pigs had sterile lungs. The other two, both of which had been ventilated for seven days, had low levels of colonization.

“Orientation of the trachea above horizontal was uniformly associated with VAP and respiratory failure; positioning the trachea below horizontal consistently prevented development of VAP,” conclude the investigators. They published their findings ahead of print in *Intensive Care Medicine* on Feb. 18.

### “Awake” ECMO outperforms CMV as a bridge to transplantation

Patients awaiting a lung transplant may benefit from “awake” extracorporeal membrane oxygenation (ECMO), report German researchers publishing ahead of print in the *American Journal of Respiratory and Critical Care Medicine* on Jan. 20. They compared awake ECMO in 26 spontaneously breathing patients with terminal respiratory or cardiopulmonary failure to CMV in a historical group of 34 controls who received CMV as a bridge to transplant.

Duration of ECMO support was similar to duration of CMV, and six of 26 and 10 of 34 patients, respectively, died before they could receive a lung transplant. Among those who received a lung transplant, survival was significantly higher in the ECMO group at six months, 80% versus 50%, and patients in the ECMO group also required shorter postoperative mechanical ventilation and trended toward a shorter postoperative hospital stay.

“ECMO support in awake, non-intubated patients represents a promising bridging strategy, which should be further evaluated to determine its role in patients with end-stage lung disease awaiting lung transplantation,” write the investigators.

### NIPPV reduces the need for MVET in preterm infants

California researchers found nasal intermittent positive pressure ventilation (NIPPV) reduced the need for mechanical ventilation via endotracheal tube (MVET) in preterm infants and resulted in better clinical outcomes when compared to nasal CPAP (NCPAP). The study was conducted among 110 infants born at less than 30 weeks gestation who required intubation and surfactant for respiratory distress syndrome within 60 minutes of delivery. The infants were randomized within 120 minutes of birth to early extubation to either NIPPV or NCPAP. Results showed:

- 40% of the infants in the NCPAP group needed MVET at seven days of age versus 17% in the NIPPV group.
- Days on MVET were 12±11 days in NCPAP group compared with 7.5±12 days in the NIPPV group.
- Clinical bronchopulmonary dysplasia (BPD) developed in 39% of those in the NCPAP group compared to 21% in the NIPPV group.
- Physiological BPD was 46% in the NCPAP group versus 11% in the NIPPV group.
- No differences in any other outcomes were noted between the two groups.

The study was published ahead of print in the *Journal of Perinatology* on Feb. 2.

**NEW!**



**PROFESSOR'S ROUNDS 2012**

## The Mandate to Reduce Hospital Readmissions: How Respiratory Therapists Can Help

**John R. Walton, MBA RRT FAARC**  
**Sam Giordano, MBA RRT FAARC**

**Item # PR20121**

\$295 for Nonmembers  
\$265 for MEMBERS



Sponsored in part by an unrestricted educational grant from

**monaghan™**

Present this current respiratory care topic on DVD to your entire staff. Topic is approved for one [1] CRCE® per participant.

Find out more at [www.AARC.org/go/pr2](http://www.AARC.org/go/pr2)

# Strengthen Your Role

## in the Prevention of Ventilator-Associated Pneumonia (VAP)

You already know that ventilator-associated pneumonia (VAP) is responsible for increased morbidity and mortality and adds thousands of dollars to the health care system. Preventing VAP is key to improving those patient outcomes and lowering costs. As respiratory therapists, you have a unique opportunity to play a vital role in meeting this challenge as members or even leaders of the VAP team. This online course from the AARC is aimed at enhancing your knowledge of proven strategies to minimize the occurrence of ventilator-associated pneumonia.

**NEW ONLINE COURSE FROM THE AARC!** 

## Empowering the Respiratory Therapist to be the VAP Expert

*This course includes:*

- ▶ **Definition & Diagnosis of VAP**
- ▶ **Epidemiology, Pathophysiology, Detection, and Risk Factors**
- ▶ **Current Prevention Strategies**
  - General Prophylaxis
  - Intubation and Mechanical Ventilation
  - Aspiration, body position, and enteral feeding
  - Modulation of colonization: oral antiseptics and antibiotics
  - Stress bleeding prophylaxis, transfusion, and hyperglycemia
- ▶ **VAP prevention efforts in non-ICU settings such as LTACs, SNFs, home**
- ▶ **Review of the national imperative to reduce/prevent healthcare-associated infections (HAIs), specifically ventilator-associated pneumonia (VAP)**
- ▶ **Essential elements required for launching and sustaining an effective VAP Prevention program**
- ▶ **Why it is important for RTs to understand, treat, and “own” VAP prevention**

Earn 2.5  
CRCE® credits  
when you complete  
this online course  
and pass the  
accompanying  
test.

*Empowering the Respiratory Therapist to be the VAP Expert – Online Course*

**NEW IN 2012!**

Nonmember Price \$50.00 **MEMBER PRICE \$25.00**

Member  
Savings  
\$25

**Register at [www.aarc.org/education/aarc\\_crce/](http://www.aarc.org/education/aarc_crce/)**



Presented by the  
American Association  
for Respiratory Care

Sponsored in part by an unrestricted educational grant  
from Kimberly-Clark



**Kimberly-Clark**

**Presenters:**

**Patrick J Dunne, MEd RRT FAARC**  
**Roger D. Seheult, MD**

Visit [www.aarc.org/education/aarc\\_crce/](http://www.aarc.org/education/aarc_crce/) for all AARC continuing education courses.

## Civility in Discourse

by Anthony L. DeWitt, JD, RRT, FAARC

Recent events have made it necessary for me to address an issue that is important and one that is very often overlooked. Respectful disagreement is healthy in any profession. Disrespectful disagreement has no place in a profession that bases its doctrines on science. Before we go there, first, some background.

Early on in my career as a therapist, I learned that where a person had worked and what they had done, colored their perception with regard to how a patient should be treated. When I worked at a hospital in Florida, the therapists and medical directors took the position that from the moment of intubation, therapists should be working to get patients off ventilators. But back in the Midwest, the physicians expressed a desire to “rest” the patient on the ventilator. Newer physicians trained under evidence-based medicine often took completely different tacks. The idea of evaluating a person’s education and research biases became second nature to me. It allowed me to understand the best way to approach a physician or nurse in order to change their opinion. But that process always started with recognizing that they knew a lot of things I did not know and had experiences I had never had.

### Personal attacks

It is always legitimate, in discussing any topic with peers, to question what degrees the person holds and what their qualifications are. But I have often been amazed at how unimportant many people feel such academic qualifications are.

In a recent case involving the odor nuisance caused by a confined animal feeding operation (CAFO), the defendants put up an expert with several degrees from nu-

merous Ivy League schools. The plaintiffs offered the testimony of plain folks about how overpowering the stench of hogs was and how it affected their lives. The verdict was for the plaintiff; and when questioned about the Ivy League expert, the jurors simply said, “Anyone who has smelled hogs knows more than that guy!”

Similarly, the federal rules of evidence say an expert is someone who is qualified as a result of training or experience. Even though a CRT may not hold a four-year degree or an advanced credential, a jury can evaluate his credentials and determine whether his testimony has weight and matters. Similarly, some of the best ideas I ever heard floated in an ICU came from therapists who had taken correspondence courses in respiratory care and who learned patient care at the bedside from other therapists.

Recently on a listserve associated with therapists, an RT called into question another therapist’s right to offer an opinion. When the poster received a response that identified the other person’s degrees but not their institutions, the therapist made an end run. They posted that they had checked into the person’s profile to find that the person’s bachelor’s degree was from a university considered a degree mill and, what’s more, the person’s master’s degree was not from an accredited college.

### about the author...



Anthony L. DeWitt, JD, RRT, FAARC, is an attorney and a partner in the firm Bartimus, Frickleton, Robertson & Gorny, PC, and resides in Jefferson City, MO. He has also authored two books and numerous legal journal articles. This article is not a substitute for legal advice.

### Legal implications

When you start making personal attacks on the Internet, you need to be aware of the legal implications of what you do. The poster’s comments referenced above implicate two rather serious torts: *defamation* and *trade libel*. This is because neither school is a degree mill and both schools

are accredited. As such, the attack on the person's credentials could have caused harm not only to the therapist involved in the discussion but also to the entities that issued that person's college and graduate degrees.

*Defamation* involves publishing a false statement about another person that casts them in a negative light. For example, saying a person is a criminal, when in fact they are not, is considered to be a defamatory statement. While mere statements of opinion are generally not considered defamatory (i.e., "In my opinion, Jules is a jerk"), framing something as an opinion but stating it as a fact can still land a person in hot water.

*Trade libel* is the publication of a false statement that intentionally disparages the quality of the services or products of, and results in economic harm to, the business affected. Saying that a certain college or university sells degrees is just the kind of statement that can have a sternly worded letter from a lawyer finding its way to your mailbox.

In an electronic age, the things we post online are stored and available forever. They are seen by (and accessed by) hundreds of people, and emails are often copied and sent on to others. Recently, federal district judge Richard Cebull of Montana found this out when he

forwarded a racist joke. Similarly, Rush Limbaugh found out from more than 40 advertisers that calling women names and suggesting they post inappropriate videos is not conducive to an organization's advertising revenue. There is nothing wrong with being passionate about something. There is nothing wrong with spirited discussion. Learning to disagree, however, without being disagreeable is a skill every therapist needs to master.

I have written many emails, and many letters I did not send. I do not regret not having sent any of those emails. But there are a few emails I wish I had not sent because they went too far. When you go outside the bounds of reasoned discussion and start attacking people based on where they received their degrees, you trample on the hard work of people who worked a long time and spent a lot of their own money to obtain degrees that mean something to them.

### The mean-spirited therapist

When you act in a mean-spirited way, then that is how you are perceived. That is harmful to your career and harmful to your profession. And it just might mean you have to hire someone like me to defend you later on. ■

Visit [www.aarc.org/store.cfm](http://www.aarc.org/store.cfm) for details.

ITEM BR0012

**Supplement your career awareness efforts with these great brochures.**

ITEM BR0013

Package of 50  
Nonmember Price \$11.95  
Member Price \$7.95

AARC MEMBERS SAVE \$4.00



**The guidance you want with the control you need – for the care your patient deserves.**

Make clinical decisions based on real-time ventilation data with the Philips VentAssist for the Respironics NM3 monitor.

VentAssist monitors your patient and suggests changes to enhance each patient's care. NM3 with VentAssist is portable and can easily be used with any ventilator.

[www.philips.com/NM3](http://www.philips.com/NM3)

**PHILIPS**  
sense and simplicity

# Lobbying Our Legislators: From Topeka to DC

by Karen S. Schell, MHSc, RRT-NPS, RPFT; Suzanne Bollig, BHS, RRT-SDS, FAARC; and Debbie Fox, MBA, RRT-NPS

**T**he Kansas Respiratory Care Society (KRCS) has a long tradition of political advocacy that grew from our early efforts to achieve licensure, which began back in the 1980s and was a lengthy struggle. Registration (title protection) was finally accomplished in 1987. In 1992 we renewed our efforts to attain full licensure. After another seven-year struggle, the Kansas Respiratory Therapy Licensure Act was realized. Throughout it all, the KRCS learned the importance of lobbying, making personal connections, attending committee hearings, gaining support from key allies, and thoroughly understanding and learning the political process.

### For Kansas RTs, it starts in Topeka

A major strategy for the Kansas Society is to sponsor a state legislative day during every session in our state capital of Topeka, and 2012 marks our 20th consecutive event. During the years we were lobbying for licensure, we constructed elaborate educational displays featuring ventilators, ABG practice arms, crash carts, and intubation manikins. Since then our displays have focused on public education and awareness.

Depending on the issues facing the state legislature, our displays might highlight clean indoor air, secondhand smoke, or tobacco cessation. Recently, our efforts have centered on education, with displays featuring pig lungs, lung health education, inhaled medications, and COPD screening. We have promoted screening spirometry by challenging our legislators to our “hot air” contest.

The other essential activity on Legislative Day is to visit the offices of every member of the House and Sen-

ate health committees. We leave an informational packet regarding the KRCS that includes a letter from the president stating our support or opposition to various bills introduced during the session. The KRCS Legislative Day plays a crucial role even in years when the bills that have been introduced will have minimal impact on respiratory therapy because it provides us with the opportunity to promote our profession and increase awareness of respiratory health and the needs of our patients.

This year the timing of our state legislative activities and the AARC’s Capitol Hill Lobby Day came very close together and required some significant preparatory work. The KRCS held its 20th annual Legislative Day on Feb. 29, only a week before we would head to Washington, DC. Just a few days before we made our visits, we were alerted that there would be voting on several pieces of legislation that would essentially take the power out of our clean indoor air law. We, of course, lobbied our representatives to maintain the intent of the law.

We were fortunate in that on the afternoon of Feb. 29, Sen. Vicki Schmidt, chair of the Senate Public Health and Welfare Committee, sponsored S.R. 1806, a resolution encouraging the creation of a Kansas plan for comprehensive treatment of COPD. In her justification she wrote, “The major risk factor for COPD is smoking. Other risk factors include environmental exposure to air pollution and industrial irritants. Increased public awareness, early detection, and treatment are crucial in the prevention or slowing the progression of lung disease and can lead to reduced costs and better quality of life for Kansans.”

### about the authors...

Karen S. Schell, MHSc, RRT-NPS, RPFT, is director of cardiopulmonary services at Newman Regional Health in Emporia, KS. She is also an AARC PACT coordinator.

Suzanne Bollig, BHS, RRT-SDS, FAARC, is the manager of the Sleep Disorder and Neurodiagnostic Institute, Center for Health Improvement at Hays Medical Center in Hays, KS. She is also president of the KRCS and a PACT coordinator.

Debbie Fox, MBA, RRT-NPS, is a manager at Wesley Medical Center in Wichita, KS. She is also the legislative chair of the KRCS and a PACT coordinator.



Suzanne Bollig (left), Charity Clark, BS, RRT, (center), and Pat Munzer, MS, RRT, FAARC, attended the KRCS Legislative Day, which took place in Topeka just a week before the AARC's Capitol Hill Lobby Day in Washington, DC.

### Getting ready for DC

The KRCS has always been a loyal supporter of the AARC's Political Advocacy Contact Team (PACT). Two Kansas representatives were sent to the very first PACT meeting in Dallas in 1999, and after recognizing the importance of state society involvement in this aspect of professional advocacy, we have continued to send at least two, and at times up to four, representatives to every PACT Capitol Hill Lobby Day since.

We prepare for the trip by customizing the packets provided by the AARC with some additional information. Each year the American Lung Association (ALA) issues data regarding the estimated prevalence of lung disease for each state that is broken down to the county level. One of our duties is to separate the county information into each congressional district. This district-specific information is shared during our visits with each congressman. The ALA data comparing different areas of the state with the state and national averages is always well received. Kansas tends to have a little higher prevalence, which is highest in the primarily agricultural areas.

We also include a letter from the KRCS president in our packets, along with some information about KRCS activities, the number of licensed RTs in the state, and

support for the AARC's Medicare Respiratory Therapy Initiative.

Eager to start lobbying our members of Congress, Kansas jumped out of the gate early during the AARC's Virtual Lobby Week this year, sending out the plea for members to contact their legislators. Board members were encouraged to get the word out through AARConnect, at their places of employment, and via friends and family. A message was also sent out to Kansas Association members through the AARC's blast email option, urging RTs to start writing to their representatives early.

### Thank you, Janet!

One of the many lessons KRCS PACT volunteers have learned is that there is no stronger voice than that of the health care consumer. The AARC has encouraged all of us to gain the help and support of the patients we serve. In this spirit, the AARC has partnered with several patient advocacy groups, including the Alpha-1 Foundation, the COPD Foundation, the Alpha-1 Association, and most recently, the Pulmonary Hypertension Association.

In 2011, representatives of these key groups attended the informal PACT get-together that occurs each year at the AARC International Respiratory Convention & Exhibition. Organizers provided PACT members with agency updates; but most importantly for the KRCS, they shared the message that funds available to assist patient representatives to attend the PACT meeting in Washington,



Kansas PACT members made sure Alpha-1 patient Janet Henderson was comfortable on the plane to and from DC.



From left: Suzanne Bollig, Debbie Fox, Karen Schell, and Alpha-1 patient Janet Henderson gather with legislative health staffer Brian Perkins in Sen. Jerry Moran's office on Capitol Hill.

DC, unfortunately limited the number of representatives that could be sent.

With some discussion, it became clear to our state society that the amount of funding needed was not so great as to be out of our fiscal means. So a proposal was made to the KRCS Board that we fund a patient advocate to travel with us to Washington, DC, in 2012. With the KRCS Board's approval, the monies were made available in just a few weeks.

Janet Henderson, an alpha-1 patient, accompanied us on the PACT trip to Washington, DC, in March. Since she was traveling with oxygen using a limited battery source, her trip had to be carefully arranged, and plans were discussed for backup prior to boarding the airplane. An experienced traveler, Janet made arrangements for wheelchair assistance upon landing, and we quickly escorted her to her hotel.

Preparing for Janet's needs ensured a smooth trip. Our RTs accompanying her were able to space out the day's appointments so that she could make it to all of them; and we kept in touch with her prior to the trip to make sure all her needs would be met. Janet was determined to make the trip and all the visits. She lasted the whole day and was able to give our legislators the patient perspective. It was helpful to be able to stay inside and travel via the tunnels from the Senate to the House of Representatives. We also budgeted plenty of time to rest and eat, and we limited the number of times Janet would be required to get up out of her wheelchair so that she could conserve her energy.

We did face some minor bumps along the way — we had to get a substitute concentrator for the trip home and faced a delay in flights — but we were able to cope with them well. Security in the airport was also challenging for our patient, as it was difficult for her to take it slow and easy when waiting in long lines and dealing with impatient travelers. But Janet did a great job, and we are grateful for the time she spent with us on “The Hill.”

### Our voices are heard

The legislative events sponsored every year by the KRCS and AARC have given us the chance to speak up for issues that are important to our profession and our patients. By meeting with our

elected officials on the state and national levels, we feel that we are doing our part to ensure our patients have access to the care they need to live well despite their chronic lung conditions. ■



Karen Schell and her colleagues spaced out the AARC Lobby Day meetings to ensure Alpha-1 patient Janet Henderson would have plenty of down time for rest and meals.

## Topics For Professor's Rounds 2012

### ■ The Mandate to Reduce Hospital Readmissions - How Respiratory Therapists Can Help

John R. Walton, MBA RRT FAARC  
Sam Giordano, MBA RRT FAARC

**monaghan™**

### ■ Medical-Legal Implications of the Changing Healthcare System for Respiratory Therapists

Anthony L DeWitt, JD RRT FAARC  
Doug Laher, MBA RRT

### ■ Reducing Cost While Adding Value - Critical Roles for Respiratory Therapists

Rick Ford, BS RRT FAARC  
Doug Laher, MBA RRT

**Dräger**

### ■ Managing the Chronically Ill Pediatric Respiratory Patient

Bruce K Rubin, MD MEngr MBA FAARC  
Timothy R. Myers, BS RRT-NPS

### ■ Educating Patients with Chronic Respiratory Disease – RTs Make the Difference

Timothy R. Myers, BS RRT-NPS  
Tom Kallstrom, MBA RRT FAARC

### ■ Palliative and End-of-Life Care: What Respiratory Therapists Need to Know

J.Randall Curtis, MD MPH  
Dean Hess, PhD RRT FAARC

### ■ Get 'Em Movin' - Early Mobility for Ventilator-Dependent Patients

Eddy Fan, MD FRCPC  
Dean Hess, PhD RRT FAARC

 **CareFusion**

### ■ Improving Patient Safety - How Respiratory Therapists Can Contribute

Karen Frush, MD  
Ira Cheifetz, MD

### **BONUS**

#### Effectively Treating Tobacco Dependence:

#### We Can Move the Mountain

Michael Fiore, MD MPH MBA  
Sam Giordano, MBA RRT FAARC

As shown above, some topics are sponsored in part by unrestricted educational grants.

We would like to thank our Sponsors for supporting Professor's Rounds through unrestricted educational grants. The AARC has the sole responsibility of assuring appropriate educational content of Professor's Rounds.

**PLEASE NOTE:** One topic is released each month beginning in April 2012 and will be shipped automatically to series purchasers. Topics and presenters are subject to change.



# PROFESSOR'S ROUNDS 2012

## RESPIRATORY THERAPISTS ADDING VALUE IN THE CHANGING HEALTHCARE SYSTEM

*Improve Patient Safety to Improve Patient Care*

### THE AARC PROFESSOR'S ROUNDS FOR 2012 PROVIDES:

Eight [8] lectures on topics associated with patient safety and the role of the respiratory therapist

### **BONUS!** WITH SERIES PURCHASE

**Tobacco Cessation Program**  
**Michael C. Fiore, MD MPH MBA**  
- a \$320 value!

- ✓ Provides 8 in-service training lectures for your entire facility
- ✓ Presented by recognized leaders and specialists in the trends and practices featured
- ✓ Approved for 1 CRCE per topic per participant for your entire facility
- ✓ Includes complete Proctor Guide, Course Materials, Attendance Logs, and Completion Certificates
- ✓ Adjusts to flexible schedules with the DVD that can be viewed at any time
- ✓ Eliminates travel expense and time, allowing faster return to patient care
- ✓ Invite other health care colleagues in your institution to view these programs

### AARC Professor's Rounds 2012 - The Series includes 8 scheduled lectures + 1 bonus lecture

#### ITEM # PR2012S

Nonmember Price \$1,605

**MEMBER PRICE \$1,420**

**Member  
Savings  
\$185**



Individual topics will be available for purchase as released.

Visit [www.aarc.org/education](http://www.aarc.org/education) for more information.

## Hospitals and Home Care

by Sam P. Giordano, MBA, RRT, FAARC

Costs of government, health care, and respiratory care are topics near and dear to our hearts. As we evolve and reform our health care systems, we all want to ensure that we don't just cut services in order to cut costs. This could hurt patients. We would rather have a different scenario — one that would permit us to work even closer with our patients who have chronic lung diseases and actually help them manage their diseases much more effectively. That will save money for all hands.

We know there's room for improvement. We've known that for decades, but this time it's different. Costs are so high that regardless of which side of the political or ideological fence you sit on, we can all agree there are things we can do in respiratory care to help manage down the costs of that care by improving the respiratory quality of life for our patients.

In the old days (indeed, the last century) we heard the saying "care follows the dollar." It was true back then, and it is true today. Add to that thought the fact that reimbursement for respiratory care services is available inside the hospital but virtually no place else, and it's not exactly a surprise that patients with respiratory diseases must be seen in an emergency department or be admitted to a hospital in order to have access to a respiratory therapist. This is a situation we must change because the cost of hospital admissions, emergency department visits, and readmissions to hospitals have far exceeded our ability as a society to sustain them.

### It may be time for a new slogan

Under the "old" way of reimbursing for services, the care did indeed follow the dollar. However, it would appear

that under our evolving health care system there are now incentives for hospitals to go beyond the walls of their institutions in order to assure that their patients with chronic respiratory diseases do not experience the same rate of hospital readmissions that they currently do today. In the near future, under the Affordable Care Act, hospitals that decrease unnecessary readmissions will be rewarded while those that do not will face a subsequent lower reimbursement rate. This change provides us with an opportunity to develop a home care — or

should I say "post hospital discharge outreach section" — in hospital respiratory services departments.

It's been documented that RTs treating patients with exacerbations of chronic conditions such as COPD can make a positive difference after that patient's exacerbation is resolved and he or she is discharged from the hospital, if they are allowed to go another step. That step addresses education, coaching, counseling, and assessment. These are the key ingredients for a respiratory care outreach program from a hospital. Preparing patients for discharge is one thing, but preparing patients to succeed post discharge can be quite another. This simply depends on organizing the appropriate skills matrix for our patients and ensuring they know how to get the most out of their respiratory resources.

Do you send them home with the right medications, delivery devices, oxygen equipment, etc?

Since about 75% of our readers are employed in hospitals and virtually all of you have at one time or another in your career been employed by hospitals, we all know what the reasons are for respiratory readmissions. Yes, some are unavoidable. However, many can be avoided if respiratory therapists in the hospital are tasked to be home care out-

### about the author...



Sam P. Giordano, MBA, RRT, FAARC, serves as AARC executive director. He can be reached at (972) 243-2272 or [giordano@aarc.org](mailto:giordano@aarc.org).

reach gurus. Think about it. How many patients have you encountered who are readmitted to a hospital simply because they couldn't use their inhalers correctly or because they did not choose to comply with the attending physician's treatment regimen, including medication beyond symptom alleviation, diet, and exercise?

We know that if we are to optimize our patients' quality of life, they need to treat their chronic disease more effectively. This can be done with our help. After all, when you think about it (with a notable exception of pulmonary rehabilitation), do we treat COPD or just exacerbations? We all know we resolve exacerbations and then discharge our patients where — away from their access to respiratory therapists. Many then have to fend for themselves.

That's why it's important for us to recognize that even being part of an acute care facility, we can make a difference outside of that facility for our patients. We could also make a difference in how our employer, the hospital, will be better off from a reimbursement standpoint if we are allowed to interface with our patients post discharge on an outreach basis. Such outreach programs will require the full-fledged support of the institution and medical staff.

### Stopping the readmission cycle

A good way to begin is to first identify what the most frequent reasons are for readmissions. Second, let's identify those that relate to respiratory care. Third, let's calculate what each potentially avoidable admission will cost the hospital as its readmission rates are monitored and its reimbursement rates are adjusted either upward or downward. The foregoing exercise should provide a general picture of the extent of the readmission problem by comparing the costs of readmissions today versus readmissions in the future after new penalties are made operational for unnecessary or avoidable readmissions. That's the economic part. This will give you the basis to set goals if you are allowed to proceed with a home outreach program. You will be able to calculate the savings to the hospital based on projecting how you could lower that readmission rate within the context of respiratory diagnoses. Such a service will provide much-needed support for attending physicians, especially family practice and general medicine. However, the whole idea is about the professional component of respiratory care, so please do not think I'm encouraging hospitals to get into the home medical equipment business but rather the education, assessment, and management of patients with chronic lung diseases.

This new step will not solve all the challenges out there for respiratory patients with regard to access, treatment, monitoring, and quality of life. However, we all know if we were allowed to follow up with patients after discharge for a limited amount of time we would be able to provide additional informational support and guidance for our patients. This has been shown to lower readmissions and improve quality of life. Tying readmission rates to reimbursement does motivate hospitals to attack the cause of unnecessary readmissions. It's a newer movement and one we should not be excluded from.

So once again, "another train is leaving the station." Let's make sure we're on it first and foremost for our patients. ■

**NEW!**



**PROFESSOR'S  
ROUNDS 2012**

## Medical-Legal Implications of the Changing Healthcare System for Respiratory Therapists

**Anthony L. DeWitt, JD RRT FAARC  
Doug Laher, MBA RRT**

**Item # PR20122**

\$295 for Nonmembers  
\$265 for MEMBERS

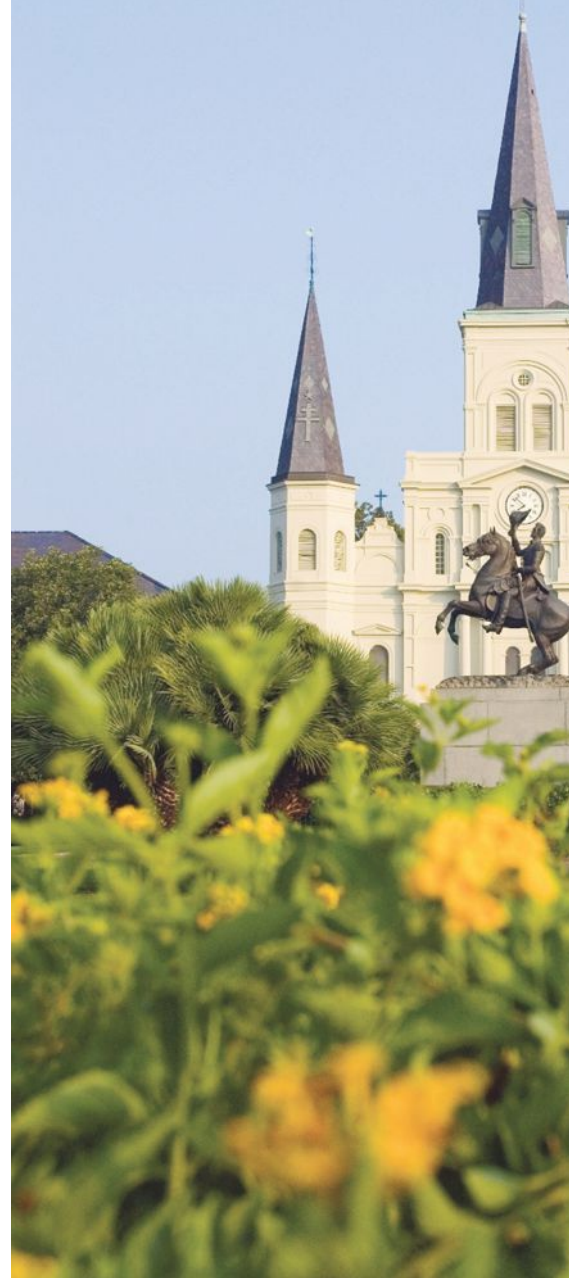


Present this current respiratory care topic on DVD to your entire staff. Topic is approved for one [1] CRCE® per participant.

Find out more at [www.AARC.org/go/pr2](http://www.AARC.org/go/pr2)

# 5 Questions for AARC Program Committee Chair Cheryl Hoerr, MBA, RRT, FAARC

As more and more provisions in the Affordable Care Act are scheduled to go into effect, health care providers are taking a closer look at all of their services. Program planners for the AARC's annual meeting are making sure you have the tools and resources you need to succeed under the new paradigm.



■ The French Quarter hosts many historic buildings, quaint shops, and unusual wares and antiques. There's something for everyone. And of course the food is heavenly!



For more information about AARC Congress 2012 or to register, log on to [www.aarc.org/education/meetings/congress/](http://www.aarc.org/education/meetings/congress/)



The 58th AARC International Respiratory Convention & Exhibition is coming up Nov. 10–13 in New Orleans, LA, and the Association's Program Committee is already hard at work on a program to deliver cutting-edge information on all of the major topics facing respiratory therapists today. We recently asked Committee Chair Cheryl Hoerr, MBA, RRT, FAARC, to tell us how the work is going. Here are her answers to our five questions:

**1. The RFP period to submit 2012 topics and speakers ended in early January. How many submissions did you get this year, and how does that number compare with previous years?**

The Program Committee's work was as voluminous and intense as always. We ended up sorting through just shy of 800 submissions in 11 different categories, which is right on par with the volume we usually see. Of course, that volume is over three times the number of presentations that are needed to fill both the Summer Forum and the Congress 2012 programs, so the Program Committee had a lot of tough decisions to make as we sifted through the great number of terrific proposals to select the best of the best.

**2. What do you think this response says about the interest that AARC members have in their annual meeting?**

The continued strong support from the AARC membership is inspiring and tells me that our respiratory therapists continue to be vested in their profession and committed to ongoing learning. I believe that RTs also take advantage of the forum presented by the Congress to network and share best practices with their peers, which then translates into improved care delivery when they return home. Of course, AARC Congress 2012 will also give RTs access to recognized experts in the profession of respiratory care and facilitate a vendor Exhibit Hall that will allow clinicians to conveniently evaluate multitudes of products.

■ There's always a parade or a band playing in New Orleans and lots of shops to find costumes and souvenirs.

**3. The Program Committee has yet to finalize the program, but what do you think will be some of the hot topics covered this year, and why did you decide to zero in on these topics?**

Before we even begin sorting through the proposals, the Program Committee spends several hours discussing the state of health care and the critical issues facing respiratory care. This discussion generates a list of what we consider as priorities for the Congress program, and we keep those priorities in mind as we sift through the proposals.

This year it was clear that the Affordable Care Act and value-based purchasing are going to make significant changes to how we practice medicine in the future. Respiratory therapists will need to keep patient safety at the top of their priority lists and will also need to become more involved in educating patients and ensuring better patient self-management skills in order to reduce unplanned readmissions. The committee also discussed the importance of RT leadership at the bedside and ways to encourage clinicians to become more actively involved in ongoing disease management throughout the continuum of care.



**4. The Program Committee works hard to provide a program that targets all of the specialty areas in the profession. How does this make for a better overall annual meeting, and what value does it deliver to employers that may be considering whether to send their RTs to the Congress?**

RTs are involved in so many different areas of care and, as a committee, we try to accommodate the needs of all AARC members. The Congress might be the only time that there are presentations specifically addressing the needs of our more specialized sections, and this is a growing concern for those RTs who have earned specialty credentials. It's also an opportunity for respiratory therapists in the mainstream sections to learn about something they have little or no contact with on a routine basis.

The value to an individual hospital is that RTs who attend the Congress return to work with an expanded understanding of what they are doing well, what could be improved upon, and ideas for enhancing the services they offer. Sponsoring a respiratory therapist to attend the Congress is also a great way for employers to demonstrate their commitment to their employees' continued professional growth and will, in turn, increase employee engagement.



Cheryl Hoerr works with the Program Committee on planning AARC Congress 2012.



■ Browse in over **40 New Orleans museums** and discover a world of fine art, history, Mardi Gras, military, and even fire fighting museums.



For more information about AARC Congress 2012 or to register, log on to [www.aarc.org/education/meetings/congress/](http://www.aarc.org/education/meetings/congress/)



■ The steamers **Natchez and Creole Queen** are offering cruises through the New Orleans harbor. They show many points of interest, and some trips include meals.

#### 5. What would be your top 3–5 arguments for why RTs should attend AARC Congress 2012?

I've already covered some of the best reasons, and there are a hundred more I could talk about; but if I had to narrow it down to just a few more, I'd say that this meeting may help you successfully accomplish your departmental quality goals because you will be able to talk one-on-one with many of the experts in our profession. Those experts will share their evidence-based practices in respiratory care and give concrete examples of what has been successful for their practice.

I'd also note that new research will be presented in the 20 OPEN FORUM symposia that will be offered during this Congress, and RTs will have the opportunity to talk directly with the study investigators about questions they may have.

Finally, the AARC Exhibit Hall provides an opportunity for clinicians to see and evaluate equipment that may help in improving the efficiency and effectiveness of the care that is provided to patients; in turn, that may help boost the financial performance of their departments. ■

**Take advantage** of this opportunity now to get up to speed on the latest developments in the profession while treating your family to a wonderful fall vacation in New Orleans. To learn more about New Orleans, go to the visitors bureau at [www.neworleanscvb.com/](http://www.neworleanscvb.com/).



■ The festivities, parades, and jazz music are fun, but the **best part of New Orleans** is the food. There are plenty of outstanding cafes and restaurants to choose from.

# Laissez Les Bons Temps Rouler: It's More Than a Meeting – It's an Event!

Seven years ago this coming August, New Orleans was devastated as Hurricane Katrina barreled onto shore with wind speeds reaching 175 miles per hour and a 22-foot storm surge that quickly overpowered the fragile levee system and left approximately 80% of the city under water.

Some people said “The Big Easy” would never recover, but the resilience of the American spirit has proven them wrong. Not only is New Orleans back, it is better than ever before. This Nov. 10–13, respiratory care professionals from around the world will get the chance to see for themselves as the AARC heads to New Orleans for its 58th International Respiratory Convention & Exhibition.

So, what should you put on your “must see and do” list? You can, of course, find lots of information online (check out our microsite at [www.neworleanscvb.com/aarc](http://www.neworleanscvb.com/aarc) to get started). But there's nothing like getting first-hand recommendations from someone who's been there, done that, so we turned to AARC members in the Louisiana Society for Respiratory Care to find out what they think you should not miss when you come to town. We'll be sharing the results throughout several issues of *AARC Times*, and Sheila Guidry, CRT, kicks off this series of stories in this edition.



Sheila Guidry, CRT



For more information about AARC Congress 2012 or to register, log on to [www.aarc.org/education/meetings/congress/](http://www.aarc.org/education/meetings/congress/)



## Dining in “The Big Easy”

■ **Acme Oyster House:** Casual dining and the best raw and charbroiled oysters since 1910. Other specialties include fried oysters, fried shrimp, “poor boys,” gumbo, and jambalaya. Great prices, too. This is a must while you are in New Orleans. Don’t let the line scare you; it moves fast and is worth the wait. 724 Iberville St., a few steps from world-famous Bourbon St.

■ **Drago’s Seafood:** Oversized lobster, charbroiled oysters, and famous cinnamon-topped apple cobbler. 2 Poydras St., in the Hilton New Orleans Riverside.

■ **Gumbo Shop:** Several types of Louisiana cooking, including gumbos, etouffee, shrimp remoulade, and more, plus great daiquiris. 630 St. Peter St.

■ **Red Fish Grill:** The specialty here is hickory-grilled redfish topped with crab or crayfish. The double chocolate bread pudding is “to die for.” 115 Bourbon St.

## Favorite Things To Do

■ **Street Car Ride to the French Market:** Ride along the river to the French Market and shop at America’s oldest public market, where you’ll find homegrown specialties, food stalls, retail shops, and a flea market. Then have a delicious pizza at the Louisiana Pizza Kitchen at 95 French Market Place.

■ **Magazine Street Uptown:** Enjoy the many shops and boutiques along this famous street. My favorite is local jewelry designer Mignon Faget, featuring her extraordinary jewelry with a New Orleans flare.

■ **Rodrigue Studio New Orleans:** This is the locally owned gallery of George Rodrigue, representing his Cajun roots and his popular “Blue Dog” series. 730 Royal St.

■ **Royal Street Antique Stores:** For the antique lover, these shops in the French Quarter, just one block away from Bourbon St., will intrigue you.

■ **Julia Street Art Galleries:** Also casually known as “Julia Row,” this area is for the art lovers and considered by many as “the So-Ho of the South.” 400–700 blocks of Julia Street. ■



## Family-fun Tours

■ Plantation tours, fishing charters, and swamp tours are for those who want to explore the different areas around New Orleans and learn all about the heritage. New Orleans Online lists the available tours.

Go to [www.neworleansonline.com/neworleans/tours/](http://www.neworleansonline.com/neworleans/tours/)

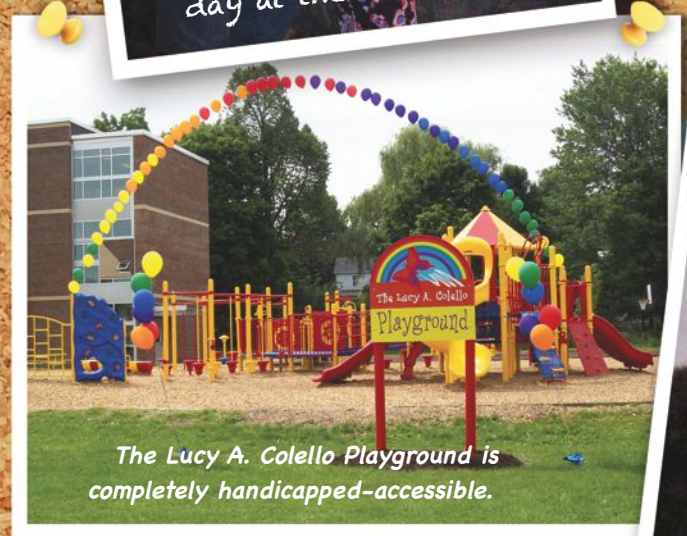
# All in the Family

Loved ones with pulmonary problems inspire respiratory care careers

The respiratory care profession is full of people who decided to be a respiratory therapist because they or a family member suffered from a respiratory condition. Two newly minted therapists — one who just graduated in April and another who will walk across the stage later this month — share their stories.



Joe and Lucy enjoy a day at the beach.



The Lucy A. Colello Playground is completely handicapped-accessible.

Everyone in Watertown fell in love with Lucy, including her own elementary school.



*For me, something that had already taken place in my life and changed me forever . . . led to my career change.*

# Lucy

by Joe Colello

When most people are choosing a career, they think about the job market, the long-term outlook for their choice, and (of course) how much it pays. In short, they look at things that are in the future. My decision to become a respiratory therapist took the opposite direction. For me, something that had already taken place in my life and changed me forever led to my decision to change careers at the age of 36. My daughter brought me to the respiratory care profession, and it is the best decision I have ever made.

## **A long journey begins**

In the early morning of Aug. 31, 2000, my second daughter, Lucy Annabel Colello, was born. When we were deciding on a name, all of us loved the name “Lucy.” When we looked it up, we found it meant “the bringer of light.” We just had no idea that it would be so fitting.

Several months prior, my wife Robin, oldest daughter Isabella, and I were told that Lucy was exhibiting some issues with her lower extremities. In addition to the baby showing no movement in her legs, my wife was having polyhydramnios,

which required multiple fluid decompressions by amniocentesis.

When Lucy was born, she was immediately intubated and taken to the neonatal ICU (our hospital was in Syracuse, NY). We met with the neonatologist, who informed us that Lucy was on a ventilator and that they were unsure of her prognosis. The normal thoughts of having a child were soon erased, and a long journey into the unknown began.

At first her diagnosis was arthrogryposis (also known as arthrogryposis multiplex congenita), which is a rare congenital disorder characterized by multiple joint contractures and can include muscle weakness and fibrosis. Because of this, both hips were dislocated. Due to her low muscle tone and weight, she had issues maintaining her airway after she was extubated, so a tracheostomy was placed along with a feeding tube.

We remained in that NICU for more than two months and then transferred to another hospital NICU in Watertown, NY, which is where we live. Lucy remained there for another couple of weeks



*There is no doubt that I would not be doing any of this if it weren't for the journey my family took with Lucy. Her spirit has touched so many people.*

while we prepared our home for her arrival.

### **No choice but to learn**

Just before Thanksgiving of 2000, we were finally able to bring Lucy home. Over the next several months, she was on a home ventilator only at night. We did have home nursing but at times were faced with personnel who did not understand ventilation. So through our home training, I was forced to learn about ventilation. I became very familiar with terms like “PEEP,” “PIP,” and “humidification” — terms that were like a foreign language to most people. We also did all of her tracheostomy care, including trach changes. We did feeding tube changes every month as well, and we changed circuits when necessary, plus we problem-solved when the alarms sounded — all without taking any formal cardiopulmonary training.

The amazing thing through all of this was that Lucy was actually getting better. One of our many specialists was neurology, which was looking at her low tone and lower extremities. Through functional electrical stimulation, they found that her nerves were repairing themselves, which mystified our doctors.

Over the next several years, we lived a very sheltered life. We were so afraid of exposing Lucy to any type of germs. She began to walk even with her dislocated hips, to the point where we questioned whether we should actually have them put back into place. We consulted with Stephen Albanese, MD, at SUNY Upstate Medical University's orthopedic department, and he recommended placing them into the joint. So Lucy had double hip reloca-

tion surgery, which required both femur bones to be shortened to allow the hip bones to be placed back into joint.

### **Traveling to Boston**

The two surgeries took place one month apart and without any complications. At this point, we thought we were in the clear, but unfortunately Dr. Albanese noticed that Lucy's spine had begun to curve. Understanding the complexity of this situation, Dr. Albanese recommended us to Children's Hospital in Boston, MA, where they dealt with more of these types of patients.

Our family met with John Emans, MD, who is the director of spine surgery at Children's. He was participating in a program called VEPTR, which stands for “vertical expandable prosthetic titanium rib.” The VEPTR rods stabilize the spine but also allow the spine to grow. In 2004, two VEPTR rods were placed. Prior to surgery, Lucy was placed in traction, which made her a couple of inches taller, but amazingly did straighten her spine.

The VEPTR protocol calls for adjustments every six to 10 months to allow for normal growth. This meant that twice a year we would drive to Boston and have the VEPTR rods lengthened. This required a minor surgical procedure. Lucy would remain in the hospital overnight and then go home the next day. We made these trips over the next three years, usually trying to plan a special surprise for Lucy during each one. One of my most memorable trips was the one we took before Christmas one year. On this trip, we put on our dressiest clothes and attended the Christmas special of

the Boston Pops. To this day, it was one of the greatest times I ever spent with Lucy.

### **More complications**

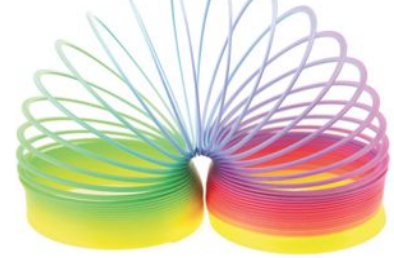
Throughout all of this, Lucy was getting bigger. At age five, her tracheostomy was removed. She attended pre-school, started taking a dance class with the aid of a walker, and even went kayaking during the summer. But at the same time, the rods that were placed at age four were ending their effectiveness. In addition, Lucy was developing a kyphosis (overcurvature of the thoracic vertebrae in the upper back).

In the fall of 2007, under the advice of Dr. Emans we decided it was time to see if the kyphosis could be fixed along with moving forward with the VEPTR rods. On Valentine's Day of 2008, Robin, Isabella, and Nina, our youngest daughter (who was three at the time), and I left for Boston. The treatment entailed having Lucy in traction again, but this time for 30 days to maximize the traction and see if the kyphosis would straighten.

After one week in traction, no change had taken place. Because of that, a new plan was mapped out which was much more advanced and invasive. This was going to be a procedure that even Dr. Emans was not that familiar with, so the outcome was unknown. Throughout all of this, Lucy was demonstrating an abnormal breathing pattern and use of her respiratory system. Due to the traction, she was not utilizing her muscles properly, so she developed pneumonia. She was transferred to the ICU and placed on bi-level PAP. She remained there for several weeks. The

*“Well, I stand proudly today and state that not only do heroes exist but I have a hero... and my hero is Lucy.”*

– Joe Colello



traction was removed, and the scheduled surgery was cancelled due to her very serious illness.

All of us decided that we needed to let her fully recover before any surgery was to be performed. Since that time frame was not known, no plans were made. It wasn't until April of 2008 that we made our trip back home. Two months in Boston had taken its toll on all of us. Both Robin and I had been back and forth to try to work, but that was very hard to do. Fortunately, we were both self-employed during that time, which meant we didn't lose our jobs; but it still meant we could not all be together.

As spring came, we tried our best to return to normal, but the inevitable decision still loomed over us — what were we going to do? If we didn't go forward with the surgery, Lucy would eventually become even more compromised. If we did go forward with the surgery, we were still looking at the unknown because nobody could give us any type of prognosis. These were not the kinds of options we wanted.

All of us just kept doing our best to keep moving forward and looking for a sign to lead us to the right decision. In May, we purchased a new Labradoodle puppy, Ginger. Robin had researched them and found that they are very social and extremely loyal. We felt this was exactly what Lucy needed, not only to serve as a companion but also to be trained as a therapy dog for her.

Things seemed to be moving forward as we started to prepare for the summer months. But all of that changed on the morning of June 8. That was the day we lost Lucy. Isabella, Nina, and Lucy were having a sleepover in our living room, and she passed in her sleep. It was determined that her passing was natural. More specifically, her

heart had been working overtime for so long due to her cardiovascular compensation that it just couldn't do any more.

The community's reaction was overwhelming. Hundreds of people came to see us, and we received cards from many familiar names and some from people we didn't even know. Even though Lucy was ours, her loss was felt not only by us but by everyone who had ever had the chance to be around her. I am not sure if the size of her spirit will ever be able to be measured.

One legacy that Lucy left our community was the construction and dedication of a 100% handicapped-accessible playground located at her school, Sherman Street School in Wattertown. Lucy was one of the founding students who started the process of getting a playground of this kind; and to her lasting memory, it was named the Lucy A. Colello Playground.

### **Finding my path**

So, this brings us back to my story of becoming a respiratory therapist. Throughout this entire journey, every time we were in the hospital I felt so comfortable. I wasn't afraid. Even to this day, I still miss going to Boston Children's. Not because of the procedures that Lucy had to go through, but because it felt like home.

During the weeks and months that followed Lucy's passing, I did some soul searching. My current occupation as president and CEO of a bottled water company just didn't seem relevant anymore; it didn't seem like it was what I was supposed to do. In the spring of 2009, I decided to attend an open house at SUNY Upstate Medical University in Syracuse. There I met with the chair of the department of respiratory therapy education, Joseph Sorbello, MSEd, RRT, and talked to him about the program. I

left there knowing that I had found my path.

With the help of my family, over the next couple of months I formulated a plan for me to attend. It was determined I would have to leave my current career and go to school for three years as I was short some prerequisites. So I had to start at our local community college to begin the process.

In the winter of 2010, I received my acceptance letter from SUNY Upstate to begin in the fall of 2010. My dream was taking shape. As I write this article in late February, I have two more months to go before graduation. Without a doubt, this has been one of the most rewarding experiences I have ever had. The respiratory faculty have been extraordinary in teaching all of us the true meaning of being a respiratory therapist. When I graduate, I know that I will be prepared to handle anything that is given to me.

### **Heroes do exist**

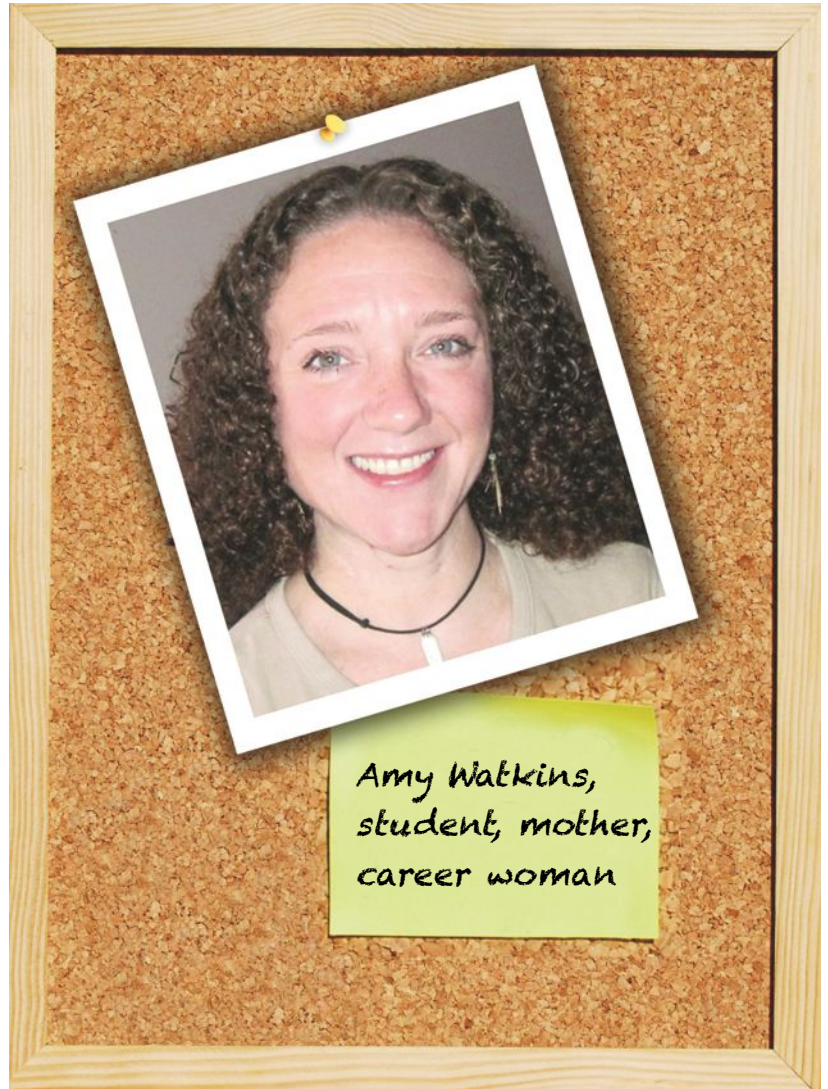
There is no doubt that I would not be doing any of this if it weren't for the journey my family took with Lucy. Her spirit has touched so many people. During the dedication ceremony of her playground, I was honored to be able to speak on my family's behalf. This is part of what I said that day: “In today's fast-paced society, one word does not get brought up enough and that word is ‘hero.’ By definition, ‘hero’ means: In the face of danger and adversity or from a position of weakness, displays courage, for some greater good of all humanity. Well, I stand proudly today and state that not only do heroes exist but I have a hero... and my hero is Lucy.” ■

**Joe Colello is a recent graduate of the RC program at SUNY Upstate Medical University in Syracuse, NY.**

# My Roundabout Road to Respiratory Care

by Amy Watkins

*A career as a respiratory therapist wasn't what I had in mind back in 1986 at the age of 18. In fact, I had no idea what I wanted to do or be.*




I had just graduated from high school and was about to begin a full-time job with the New York University School of Law Housing Office. As an employee, the tuition benefits would be great. I could attend college part time and end up with a degree without any student loans to repay. That is how my college career began back in 1987.

## **Life on hold**

I began studying liberal arts but soon realized that my lifelong fascination with all things medical and the human body, as well as numerous family illnesses, pointed me in the direction of a career in health care. I changed my major to nursing. In 1988, my father, a quadriplegic for the previous five years due to multiple

sclerosis, developed pneumonia, was intubated and mechanically ventilated, trached two weeks later, and passed away a week after that at the age of 46. The emotional devastation was great, and both my nursing studies and job at NYU came to a halt in 1989. I took a two-year sabbatical from everything — work, school, and life.

Fast-forward 20-plus years. I'd had a 22-year career that began in word processing and ended in software test and release engineering. The layoffs at my software company had been ongoing quarterly for the previous three years, and I knew my time was coming. Over the years, I had grown tremendously in my career. But what began with enthusiasm for technology ended in a lack of passion. I excelled at my job, and I received



*I plan to  
make the  
next 25 years  
the best yet.*

*Well, I stand proudly today and state that I am a 43-year-old single mother who decided at the age of 41 it was time to make life meaningful by pursuing a career in a profession that mattered, that made a difference to humanity — one in which I could be challenged and of which I could feel proud.*

awards and personal recognition. But it left me feeling completely unfulfilled and without worth. I began to formulate a plan to return to school and nurture my passion and love for medicine, bettering humanity and myself in the process. I knew I had something more to give that would make a difference to others. Software was not it.

### **The puzzle pieces come together**

My layoff came in early May 2010. I had spent the previous couple of months gathering SAT scores, college transcripts, and high school transcripts and having them sent to North Shore Community College in Danvers, MA. Originally, my plan was to return to nursing school; but unfortunately the program was full for the fall 2010 semester, and I had no time to wait. I considered radiologic technology, but learned that their program was also full. General health sciences was something I had neither the desire nor time to do. My education needed to begin “now” and move me forward into a career within two years.

I then talked with the respiratory care program director. I was no stranger to respiratory conditions. My mother had COPD and died from a massive pulmonary embolism at the age of 64. I had a small child with asthma. A very close family friend who’d had polio as a child and been sustained for a year in an iron lung had been suffering from post-polio syndrome for the past 25 years, trached and mechanically ventilated at night. It was as if all of the pieces of the puzzle came together.

### **Becoming a student**

In September 2010, after being away from school for over 20 years, I returned as a full-time college student. I was both terrified and thrilled. Quickly, I learned that college was an entirely different environment in 2010 versus 1987. The media used in education, along with the explosion of technology, made for a bold new world for me; and it’s a world that I have enjoyed immensely. I have been “supercharged” to learn, strive to excel, and to learn more.

I had never gotten to the point of clinicals in nursing school before, so it has been at times both awkward and empowering to work with patients. As a fourth semester respiratory care student, the previous three semesters have taught me more than I ever believed possible. Since resuming my studies in September 2010, I’ve become passionate, driven, and enthusiastic, yearning for more understanding, knowledge, and growth.

Since June 2011, I have held a student internship in adult respiratory care in a fantastic Boston hospital. This past semester, I have been a respiratory care tutor to my peers. I have been challenged, motivated, encouraged, and humbled by my experiences. My patients, instructors, and colleagues have inspired, frustrated, educated, and helped me to grow as a student practitioner and human being. Where I could learn more patience, they taught me that. Where I have needed perspective on life, its blessings and hardships, they have given me that. Where I have desired personal development and growth, my instructors, mentors, employers, patients, and child — in his relentless support of my pursuit of my dream — have delivered. And where I have needed friendship and camaraderie, I have found them.

### **The best is yet to come**

I am a 43-year-old single mother who decided at the age of 41 it was time to make life meaningful by pursuing a career in a profession that mattered, that made a difference to humanity — one in which I could be challenged and of which I could feel proud. When I reflect back on my history, dreams, life, passion, and love of technology, respiratory care makes more sense than I ever thought possible. With as much sense as it makes rationally, it makes even more sense to me emotionally. I figure I have at least 25 more years to make the most of my career — and I plan to make the next 25 years the best yet. ■

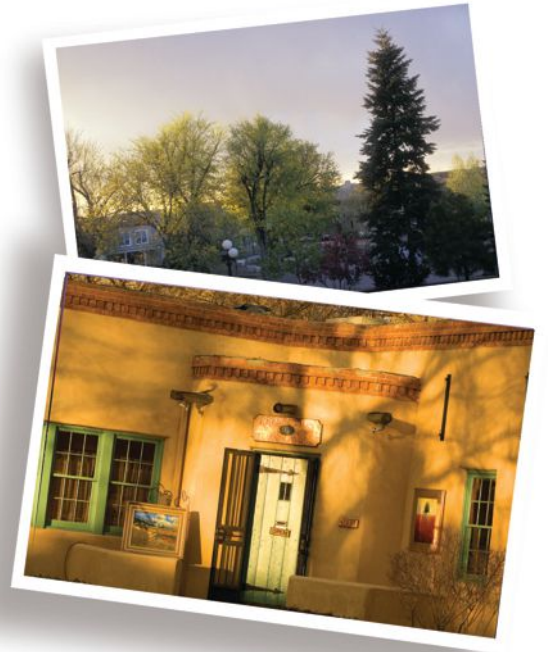
**Amy Watkins is a student in the RC program at North Shore Community College in Danvers, MA, where she reports she has regularly made the Dean’s List. She is expected to graduate later this month.**

# 10 Things To See and Do in Santa Fe

Summer Forum venue combines art and culture with Native American heritage

New Mexico is known as The Land of Enchantment, and this year's Summer Forum venue lives up to the title. As the second oldest city in the United States (behind St. Augustine, FL) and the oldest state capitol, Santa Fe is steeped in history. Located in the high desert at the base of the beautiful Sangre de Cristo range of the Rocky Mountains, the city was founded by Spanish explorers in 1610 and celebrated its 400th anniversary in 2010.



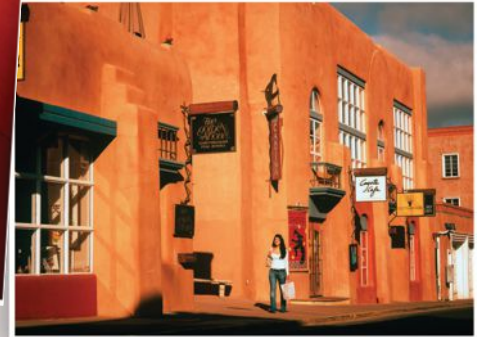


Today it attracts more than a million visitors every year who come to take in the rich Native American traditions and exciting art scene. World-class restaurants abound as well, and the nearby mountains provide the perfect chance to commune with nature.

Here are 10 things you won't want to miss when you're in Santa Fe for the AARC Summer Meetings this July 12–15:

**1. The Plaza:** Situated in the middle of the downtown area, this is the heart of the old city. Take a stroll along the portal at the Palace of the Governors where Native American artists sell their work almost every day of the year, then check out the palace itself, which is the oldest public building in the United States, built in 1610. The streets radiating out from the Plaza are filled with quaint shops, too, so stroll around and discover everything that makes Santa Fe unique. Learn more at [www.santafe.org](http://www.santafe.org).

**2. Art and Music:** With over 200 galleries throughout the city, Santa Fe has been ranked the fourth largest art market in the country. Canyon Road is considered the center of the Santa Fe art scene, with galleries, specialty



shops, restaurants, and more. A gallery crawl takes place every Friday and Saturday evening as art galleries host openings of new exhibits and artists' receptions. The 2012 Santa Fe International Folk Art Market and the 12th Annual Art Santa Fe show run from July 13–15 and July 12–15, respectively, giving Summer Forum attendees the chance to experience two special art events. Learn more at [www.folkartmarket.org](http://www.folkartmarket.org) and [www.artsantafe.com](http://www.artsantafe.com).

Music flourishes at many local venues as well. The Santa Fe Opera will perform "Tosca" on July 13 and "Maometto II" on July 14 in its award-winning open-air theater, and the Santa Fe Chamber Music Festival kicks off on July 15 with the Helen Grime Trio for Clarinet, Viola & Piano. You can learn more at [www.santafeopera.org](http://www.santafeopera.org) and [www.sfcmf.org](http://www.sfcmf.org).

**3. Museum Hill:** Four of Santa Fe's most popular museums are located just a short distance from the downtown area on Museum Hill. The Museum of Spanish Colonial Art features mostly local artists, historic and contemporary. The Museum of Indian Arts & Culture focuses on Native American art. The Museum of International Folk Art features the largest collection of folk art in the world. And the Wheelwright Museum

has rotating exhibitions of Native American art, along with the popular Case Trading Post. The Museum Hill Café provides the perfect spot to stop for lunch, and Milner Plaza in the center of the area is a great resting place with a gorgeous view across the Rio Grande Valley. Learn more at [www.museumhill.org](http://www.museumhill.org).

**4. More Museums:** The newly opened New Mexico History Museum combines with the Palace of the Governors on the Plaza to showcase the state's fascinating history. The New Mexico Museum of Art is located next door in one of the city's most iconic buildings and features both Western artists and special exhibitions. Three blocks away you'll find the Georgia O'Keeffe Museum, the country's only museum strictly dedicated to a single female artist. The Museum of Contemporary Native Arts, a block from the Plaza, showcases modern Native American art. The nearby Cathedral Basilica de St. Francis de Assisi, with its French Romanesque architecture, has a small museum as well. Learn more at [www.museumofnewmexico.org](http://www.museumofnewmexico.org).

**5. Guadalupe Street/Rail Runner Express:** This old railroad warehouse district now houses shops and restaurants, and the area along the rail line has been developed into the Santa Fe Railyard. At over 50 acres, the Railyard is home to a 10-acre park, performance area, retail center, the Santa Fe Farmer's Market, and SITE Santa Fe, a contemporary art museum.

The New Mexico Rail Runner Express is a high-speed commuter train that runs from the airport in Albuquerque to the Santa Fe Depot, where hotels provide transportation to their facilities. Visitors can also take a ride on the Santa Fe Southern Railway, which runs an excursion train of vintage cars out to the town of Lamy and back. Learn more at [www.railyardsantafe.com](http://www.railyardsantafe.com) and [www.nmrailrunner.com](http://www.nmrailrunner.com).



**6. Outdoors:** The 1.6-million-acre Santa Fe National Forest lies just seven miles from downtown, and the Dale Ball Trail System on the city's edge offers 30+ miles of maintained trails. The Aspen Vista Trail is higher up in the Sangre de Cristo Mountains and provides more of a challenge and outstanding views, as do the network of trails connecting to the Winsor Trail. Hiking, camping, fishing, white-water rafting, horseback riding, skiing, mountain biking, road cycling, and more can be found a short distance away, too.

**7. Native American Attractions:** Eight Pueblo tribes north of Santa Fe offer a view into both the past and the present. San Ildefonso Pueblo, for example, has been in its current location for over eight centuries. In town, the Native American Artisans Program, held every day under the portal at the Palace of the Governors, is an excellent place to find authentic Native American crafts and meet with local artists.

**8. Great Food:** With over 200 restaurants featuring everything from the region's savory cuisine to modern southwestern fare to internationally inspired meals, Santa Fe has evolved as a destination for food lovers. The city's year-around farmers market has been recognized as one of the top markets in the country, providing the freshest of locally grown products. The Santa Fe School of Cooking also offers classes to help visitors master the art of cooking with chile, the city's most ubiquitous ingredient, plus other themed classes and culinary walking tours.

**9. Creative Tourism:** With more than 90 workshops, classes, and experiences to choose from, Santa Fe Creative Tourism gives visitors the chance to be more than just a spectator. Work directly with local artisans to learn everything from glass blowing to ceramics to weaving. Take a guided walk to explore the area's Native American and Spanish history. Or even sign up for a day trip to experience yoga in an ancient sacred village or learn traditional cooking methods at a local Pueblo settlement. Learn more at [www.santafecreativetourism.org](http://www.santafecreativetourism.org).

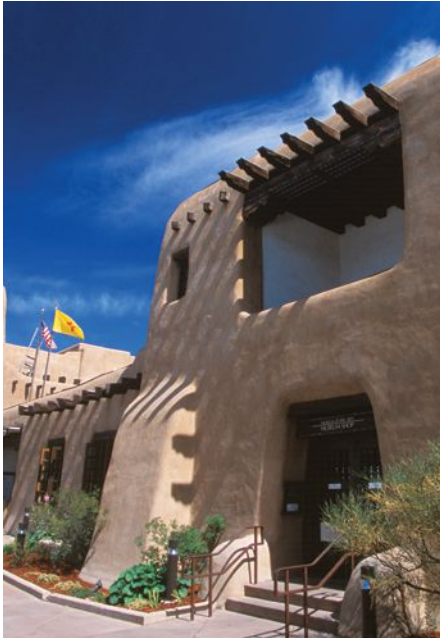
**10. Hilton Santa Fe Golf Resort & Spa at Buffalo Thunder:** Last but certainly not least, is the AARC Summer Forum venue! Located just 15 minutes north of Santa Fe, Buffalo Thunder is on land owned by the Pojoaque (po-wau-kee) Pueblo and has been named one of the top 10 places to visit in northern New Mexico. Larger than life sculptures by the governor of the Pueblo, George Rivera, adorn the entryway and lobby; and the resort features everything you would expect in a first-class resort —



including three nine-hole golf courses designed by PGA titlist Hale Irwin and golf course designer William Phillips; a state-of-the-art tennis facility; indoor, outdoor, and kids' pools; a full-service spa with treatments reflecting the Pueblo heritage; and a Vegas-style casino located one level below the hotel's lobby. All sleeping rooms are nonsmoking. You can learn more at <http://tinyurl.com/AARC-SantaFe2012>. ■



learn, sun & play



The premier respiratory care educational event of the summer joins forces with one of America's top vacation destinations in **Santa Fe, NM**

## AMERICAN ASSOCIATION FOR RESPIRATORY CARE **Pre-Summer Forum Programs**

### Thursday, July 12, 2012

**Santa Fe, NM**

#### NATIONAL BOARD FOR RESPIRATORY CARE (NBRC)

9:00 am – 12:00 noon

##### ***Item Writing Workshop***

The National Board for Respiratory Care (NBRC) will sponsor a free 3-hour item writing workshop that is designed to assist the attendee to develop his/her skills in effective and high-quality multiple-choice item writing. There is no preregistration for this workshop. The number of attendees is limited to a first-come first-serve basis while on-site. Following this workshop, you may choose to serve as an item writer for future NBRC credentialing examinations. Hone your item writing skills and enhance your program's test bank. Aid your credentialing organization in developing effective and high-quality credentialing examinations.

#### AMERICAN ASSOCIATION FOR RESPIRATORY CARE (AARC)

1:00 pm – 5:05 pm

##### ***Building a Simulation Toolbox***

**Shawna Strickland PhD RRT-NPS AE-C FAARC | Presiding**

Course capacity is limited.

Pre-registration required.

Deadline: Thursday, June 21, or when course is full.

Approved for 3.66 hours of continuing education credits (CRCE).

You must attend the entire course to receive CRCE credit.

No partial credit will be awarded.

**Target Audience:** Program Directors, Directors of Clinical Education, Department Managers, and Hospital-based Educators

Use of simulation technology has exploded over the last several years. Its role in military, research, and medical education have grown by leaps and bounds. Simulators are now routinely found at universities, community colleges and in many large medical centers. This pre-course will provide an overview of simulation technology and its role in respiratory education/competency testing. Is simulation really necessary or just an expensive replacement for live clinician and patient interaction? How can educators and managers alike utilize simulation technology to verify competence of students and staff? Attend this Summer Forum pre-course to find out.



# Meetings 2012

information

1:00 pm – 1:55 pm

## ***Overview of Clinical Simulation***

**Julianne S Perretta MEd RRT-NPS, Baltimore MD**

This presentation will provide an overview of clinical simulations. The participant will be able to discuss the role simulation holds for the future of RT education, both in the classroom and at the bedside. Included will be guidelines set by The Joint Commission and CoARC for designing simulation curriculum. Different methods of simulation will be discussed and how it can be used for RT training, competency assessment and skills acquisition.



2:00 pm – 2:55 pm

## ***Performing a Needs Assessment for Your Institution***

**Roberta Hales MHA RRT-NPS RN, Philadelphia PA**

This presentation will discuss the importance of a needs assessment for implementation and use of clinical simulators. Participants will be able to identify key elements of the needs assessment and develop various topics for their collegiate or hospital program.



2:55 pm – 3:10 pm

## ***BREAK***

3:10 pm – 4:05 pm

## ***Simulation To Evaluate Competency***

**Roberta Hales MHA RRT-NPS RN**

This presentation will discuss the creation and validation of a checklist for RT competency using patient simulation. The presenter will highlight current research for the use of measurement matrices in simulation and the role of the “debrief.”

4:10 pm – 5:05 pm

## ***Simulations on a Budget***

**Julianne S Perretta MEd RRT-NPS**

This presentation will address the financial burden of patient simulation equipment and provide creative and unique examples of utilizing this technology without a large budget. Presenter will also discuss alternatives to expensive simulator purchases and discuss opportunities to partner/contract with other local institutions already in possession of expensive simulator technology.

## **COMMISSION ON ACCREDITATION FOR RESPIRATORY CARE (CoARC)**

5:15 pm – 6:30 pm

### ***Meet the Commission***

CoARC Board members and Executive Office staff will be available to meet faculty to assist them with specific program issues and/or answer any accreditation questions they might have. Appointments must be made for this session. To make an appointment, please contact Shelley Christensen at [shelley@coarc.com](mailto:shelley@coarc.com) at CoARC by July 1.



See pages 58-60 for registration form and discounts, how to make your hotel reservation, and transportation discounts.

**Most programs are approved for Continuing Respiratory Care Education (CRCE) credit.**

lectures  
to hear AARC Summer

learn, earn



Earn your CRCE credits, then enjoy the outstanding vacation attractions with your family.

**Summer Forum - up to 13.96 hours**

- Simulation Toolbox - 3.66 hours**
- Educator's Track - 13.47 hours**
- Manager's Track - 13.96 hours**
- Patient Education - 3.25 hours**

**AMERICAN ASSOCIATION FOR RESPIRATORY CARE**

# SUMMER FORUM

**FRIDAY–SUNDAY, JULY 13–15, 2012**

**SANTA FE, NM**

See pages 58–60 for registration form and fees, hotel reservation information, and travel discounts.

Approved for up to 13.96 hours of continuing education credit (CRCE).

## Friday, July 13, 2012

### PLENARY SESSION

7:30 am – 8:25 am

**Cheryl A Hoerr MBA RRT FAARC**

**Chair, AARC Program Committee | Presiding**

### THE TRANSFORMATION OF RESPIRATORY CARE: MORE OF THE SAME OR A DEFINING MOMENT FOR THE PROFESSION?

**Patrick J Dunne MEd RRT FAARC, Fullerton CA**

Over the past 35 years, there has been no shortage of health care initiatives directed at modernizing a delivery system believed by many to be mired in an anachronistic process lacking relevance in today's technological era. While well intentioned, most of these initiatives have wound up on the dust pile of history, leaving many jaded perceptions that significant changes in health care are all but impossible. It is therefore fair to ask whether the current calls to redefine the practice of respiratory care are simply more of the same and doomed to the same outcome, or have we finally reached a point where actual changes can take place?



### EDUCATION SECTION MEMBERSHIP MEETING

8:35 am – 9:05 am

**Joseph Sorbello MEd RRT**

**Chair, AARC Education Section | Presiding**

Updates on issues important to the section will be discussed, with interactive dialogue on how the section chair and the AARC can better serve the Education Section and its members. This is your opportunity to influence the profession and network with your peers. All Summer Forum attendees are invited to attend.

### MANAGEMENT SECTION MEMBERSHIP MEETING

8:35 am – 9:05 am

**Bill Cohagen BA RRT FAARC**

**Chair, AARC Management Section | Presiding**

Updates on issues important to the section will be discussed, with interactive dialogue on how the section chair and the AARC can better serve the Management Section and its members. This is your opportunity to influence the profession and network with your peers. All Summer Forum attendees are invited to attend.

# Meetings

added-value

## EDUCATOR TRACK

9:10 am – 12:15 pm

**Joseph Sorbello** Med RRT

Chair, AARC Education Section | *Presiding*

## TAKING A PROGRAM FROM GOOD TO GREAT!

9:10 am – 9:50 am

***Re-engaging Your Advisory Committee: From Improving Participation to Understanding Their Role in the Accreditation Process***

**Gary White** MEd RRT RPFT, Spokane WA

The lecture will describe the roles and responsibilities of the advisory committee as they relate to CoARC standards. The presenter will discuss potential solutions to the challenges faced by programs in improving advisory committee involvement and recruiting and retaining valuable advisory committee members.



9:55 am – 10:35 am

***Engaging Graduates and Employers in Program Evaluation***

**Stephen P Mikles** EdS RRT FAARC, Pinellas Park FL

This presentation will describe several methods for increasing the quantity and quality of information gathered from graduate and employer surveys. Attend this lecture and learn how to include these results in the CoARC Annual Report of Current Status.



10:35 am – 10:50 am

**BREAK**

10:50 am – 11:30 am

***Re-engaging Your Medical Director: From Improving Participation to Understanding His/Her Role in the Accreditation Process***

**David Bowton** MD FCCP FCCM, Salem NC

The presenter will describe the roles and responsibilities of the medical director as they relate to CoARC standards. The lecture will discuss potential solutions to the challenges faced by programs in improving physician interaction and medical director involvement. Attend this presentation and learn new strategies to re-engage your most valued advocate.

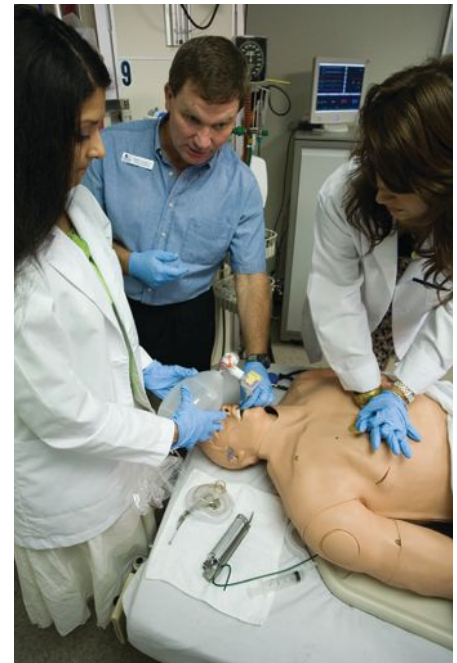


11:35 am – 12:15 pm

***Models of Successful Inter-Rater Reliability Program***

**Kathy Rye** EdD RRT FAARC, Little Rock AR

This presentation will review several models of inter-rater reliability programs and discuss how key components of each program contributed to their success. Participants will be able to identify common elements of successful inter-rater reliability programs, identify and minimize obstacles to implementation and evaluate their current program for suggested methods of improvement.



Check out the pre-Summer Forum course

## *Building a Simulation Toolbox*

Register now for this course specially designed for Program Directors, Directors of Clinical Education, Department Managers, and Hospital-based Educators.

See pages 44-45 for course agenda.

# CRCEs to earn AARC Summer

## Program Committee & Section Chairs



Program Committee Chair  
Cheryl Hoerr MBA RRT CPFT FAARC



Education Section Chair  
Joseph Sorbello MEd RRT



Management Section Chair  
Bill Cohagen BA RRT FAARC

## Friday, July 13 (cont)

### MANAGER TRACK

9:10 am – 12:15 pm

**Bill Cohagen BA RRT FAARC**  
Chair, AARC Management Section / *Presiding*

### VIEW FROM THE “C SUITE”

9:10 am – 9:50 am

**The New Health Care System: Where Do We Fit?**  
**John Walton MBA RRT FAARC FACHE, Elk Grove Village IL**

With the profound changes underway in health reform, it's crucial that RT directors understand the new rules that will dictate the organizational health of our hospitals and how we as clinicians and leaders can contribute to success. Using real examples of how health systems are grappling with the Medicare incentives under the Hospital Readmission Reduction Program and Value Based Purchasing, roles for RTs will be examined.



### CREATING A CULTURE OF ACCOUNTABILITY

9:55 am – 10:35 am

**Cheryl Hoerr MBA RRT CPFT FAARC, Rolla MO**

Many have a negative impression of “accountability,” and most think of it as knowing who to blame when things go south. However, good managers and leaders define accountability in a positive way and use it as a framework to develop and coach their employees. This presentation will review several different frameworks for developing an accountable culture within your organization and the positive outcomes that can be achieved in terms of patient safety, employee engagement, and patient satisfaction.



10:35 am – 10:50 am

**BREAK**

### JOINING THE EXECUTIVE CLUB: DO YOU HAVE WHAT IT TAKES?

10:50 am – 11:30 am

**John Walton MBA RRT FAARC FACHE, Elk Grove Village IL**

At last year's Summer Forum, a CEO described his personal journey from staff RT to the executive suite and what it took for him to make the change. This year's presentation will serve as a sequel with Mr. Walton describing the skills, knowledge, competencies, and achievements that are required for managers to be successful at higher leadership levels culminating at the executive suite.

### LEADER OR MANAGER: WHAT AM I AND IS THERE A DIFFERENCE?

11:35 am – 12:15 pm

**Frank Salvatore RRT MBA FAARC, Middletown NY**

While your title may say “manager,” it is likely your boss expects you to be a leader as well. The presenter will define and differentiate the roles, responsibilities, and characteristics for managers and leaders, and will provide strategies for developing your style and value as both. Can leaders really be born with the trait, or does it take years of practice to become good at? Attend this lecture to find out!



# Meetings

enhance

## EDUCATOR TRACK

2:00 pm – 4:20 pm

**Joseph Sorbello MEd RRT**

**Chair, AARC Education Section/ Presiding**

## FOSTERING SELF-DIRECTEDNESS IN UNDERGRADUATE LEARNERS

2:00 pm – 2:40 pm

**Shawna Strickland PhD RRT-NPS AE-C FAARC, Columbia MO**

The ability of undergraduate students to engage in self-directed learning is relevant to professional education in that it is a requisite for continuous learning after graduation. Fostering self-directedness in an undergraduate respiratory therapy program may provide a framework for future autonomous and self-directed learning as a professional. The participant will be able to define and apply self-directedness and adult learning principles, identify barriers to fostering self-directedness in learning, and develop methods to mentor and foster self-directedness in learning.



## AUTHENTIC LEARNING TASKS

2:45 pm – 3:25 pm

**Designing Authentic Learning Using the APLUS Model**

**Nancy Colletti PhD RRT CPFT, Kettering OH**

This presentation will allow participants to identify and describe authentic learning activities, describe the relationship between authentic learning and critical thinking skills, and describe each of the phases of the APLUS (active, plan, learn, use, show) model. The lecture will identify types of learning tasks, discuss the role of these tasks in respiratory care education, and highlight the use of resources and scaffolds to assist learners acquiring new knowledge.



3:25 pm – 3:40 pm

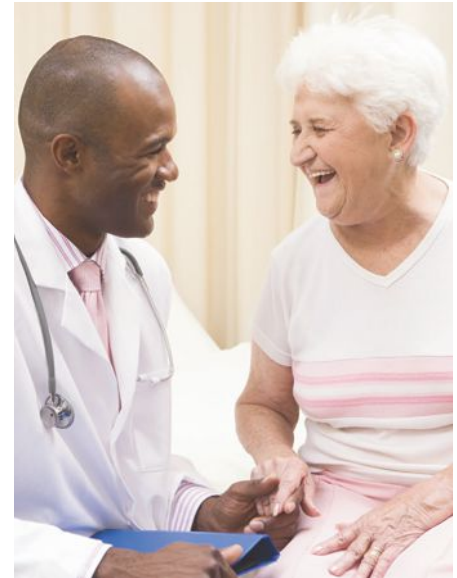
**BREAK**

## ECONOMICS 101 FOR RESPIRATORY CARE PROGRAM DIRECTORS

3:40 pm – 4:20 pm

**Tom Barnes EdD RRT FAARC, Boston MA**

This presentation will examine the current economics of respiratory care programs. It will present data from AARC 2005 & 2009 Human Resource Studies and the 2010 Survey of Respiratory Therapy Program Directors related to enrollments, graduation rates, number of faculty for the average and median program, as well as the range. The method and cost of providing clinical instruction will be discussed in terms of how it impacts program budgets, enrollment capacity, and stability. The impact of small enrollments of 15 to 20 or lower on program stability, faculty salary, and the curriculum offered will be discussed. Finally, an optimal model for enrollment size, number of faculty, and clinical instruction will be presented.



Maximize your attendance by registering for the post-Summer Forum course

Getting the Best Return on Your Investment: Maximizing Patient Education

See page 57 for details.

more for your money



When forced to  
 prioritize,  
 simply ask:  
 What would make  
 more sense than to  
 enjoy simple family  
 pleasures while  
 enhancing my  
 career?

All meetings at the beautiful  
 Hilton Santa Fe at Buffalo  
 Thunder,  
 Santa Fe, NM

## Friday, July 13 (cont)

### MANAGER TRACK

2:00 pm – 4:20 pm

**Bill Cohagen BA RRT FAARC**

**Chair, AARC Management Section | Presiding**

### WHAT'S THE EVIDENCE, AND HOW DO WE MARKET OUR SERVICES?

2:00 pm – 2:40 pm

**Garry Kauffman MPA FACHE RRT FAARC, Winston Salem NC**

We've grown as a profession from counting "Treatments Done" to "Value Added"... or have we? Many of us still count what's "countable" rather than what makes a difference in patient outcomes, satisfaction, and organizational performance. This presentation will examine peer-reviewed evidence as well as anecdotal evidence that document the value of respiratory care in the domains of financial performance, clinical quality outcomes, and patient satisfaction. The speaker will also provide a "cut and paste" plan to market the value of your services to your internal and external customers in a way that they will never question again the value of respiratory care services.



### PULMONARY REHAB: A COPY AND PASTE PROGRAM FOR SUCCESS

2:45 pm – 3:25 pm

**Mary Hart MS RRT AE-C FAARC, Dallas TX**

As the number of COPD diagnoses and aging patients increase, pulmonary rehabilitation is a service every hospital should provide. The speaker will describe the benefits of pulmonary rehabilitation, discuss G codes and billing components for both COPD and non-COPD patients, and offer suggestions on how to make PR a program your C-suite can't say no to. Are you looking to create added value for your department and staff? Would you like to add favorably to the bottom line of your organization? Attend this lecture and find out if a PR program is right for you!



3:25 pm – 3:40 pm

**BREAK**

### GET YOUR DEPARTMENT TO THE 25<sup>TH</sup> PERCENTILE

3:40 pm – 4:20 pm

**Frank Salvatore MBA RRT FAARC, Middletown NY**

If you're a manager who hasn't been compared to "benchmark" and asked to attain that level of performance, you're either the luckiest person on Earth or you can expect an e-mail about it when you return from this conference. The speaker will guide us in terms of examining whether the data is relevant, provide strategies that you can employ to improve your efficiency, and prepare you to have the conversation with your boss on how to use data.



# Meetings

**Saturday, July 14, 2012**

## EDUCATORS & MANAGERS

7:00 am – 7:55 am

### BCN: Bagel, Coffee, Networking

You asked and we delivered! In response to suggestions from those who attended previous Summer Forums, we've slotted this hour for educators and managers to ask questions of speakers, interact with their peers, and learn from one another. Enjoy a light breakfast and enjoy the company of others who are passionate about the profession.

## PLENARY SESSION

8:00 am – 9:30 am

**Cheryl A Hoerr MBA RRT FAARC**

**Chair, AARC Program Committee / Presiding**

### AGENCY UPDATES

**Karen J Stewart MS RRT FAARC, AARC President**

**Michael T Amato MBA, ARCF Chair**

**Stephen P Mikles EdS RRT FAARC, CoARC President**

**Kerry E George MEd RRT FAARC, NBRC President**

The leadership of the AARC, ARCF, CoARC, and NBRC will join attendees to discuss the latest professional, research, accreditation, and credentialing issues facing respiratory care.



9:30 am – 9:40 am

**BREAK**



**Summer Meetings**

share



Learn,  
Network,  
Exchange Ideas,  
Become Inspired  
at the  
AARC  
Summer Meetings

**Most programs are approved for continuing education credit (CRCE).**

learn



Refresh,  
Rejuvenate,  
Re-create your  
career at the AARC  
summer meetings.

See page 58 for  
local attractions.

All meetings at the beautiful  
Hilton Santa Fe at Buffalo  
Thunder,  
Santa Fe, NM

## Saturday, July 14 (cont)

### EDUCATOR TRACK

9:40 am – 12:00 noon

**Joseph Sorbello MEd RRT**  
Chair, AARC Education Section/ *Presiding*

### WIN-WIN PROGRAM DEVELOPMENT: DOING MORE WITH LESS

9:40 am – 10:20 am

#### **Preceptor Training**

**Crystal Dunlevy EdD RRT RCP, Columbus OH**

Although most respiratory therapy programs rely heavily on the preceptor model to provide clinical education, there is currently no standardized training program for clinical preceptors. This presentation will share a standardized clinical preceptor-training program that can be used by RT departments in preparing instructors to deliver effective clinical education and by the RT education program to meet the CoARC requirement regarding inter-rater reliability. Training involves the Clinical PEP (Practices of Effective Preceptors) modules that include short PowerPoint presentations and videos illustrating both effective and ineffective implementation of the topics presented. These modules represent a comprehensive preceptor-training program that could be used nationally to fulfill an important RT education program accreditation requirement.



10:25 am – 11:05 am

#### **Peer Teaching**

**Sarah Varekojis PhD RRT RCP, Columbus OH**

Research has shown that peer teaching by pairing first-year and second-year students, is not only an effective method of instruction but also enhances students' professional and personal development. Peer teaching represents an underutilized, yet highly effective resource for RT laboratory instruction. Implementing a peer teaching respiratory therapy laboratory can offer opportunities for developing leadership skills and for enhancing instruction. It potentially plays an important role in developing professional skills like communication, decision-making, leadership, confidence, respect for the "teacher" and in enhancing understanding and retention of topics for the "learner." This presentation will provide examples of successful implementation strategies and successful outcomes.



11:05 am – 11:20 am

#### **BREAK**

11:20 am – 12:00 noon

#### **Service Learning**

**Georgianna Sergakis PhD RRT RCP, Columbus OH**

Service learning as a teaching and learning strategy is appreciated by RT students and contributes to deeper understanding of the complex social and professional issues in respiratory care. However, the development of a true service learning experience for RT students involves far more than arranging a clinical experience in a community area. For students to truly "make meaning" from the experience, the instructor must carefully engineer this learning experience. Promoting community involvement in this way is mutually beneficial for both student and the community. This presentation will focus on the development and evaluation of service learning. Discussion of course construction, continuous improvement and research endeavors related to the experience will also be explored.



# Meetings

paradise

## MANAGER TRACK

9:40 am – 12:00 noon

**Bill Cohagen BA RRT FAARC**

**Chair, AARC Management Section/ *Presiding***

## PERFORMANCE IMPROVEMENT: TOOLS YOU CAN USE!

9:40 am – 10:20 am

**JB Collins III MBA RRT, Winston Salem NC**

At the conclusion of this presentation, participants will understand why they must know and use process improvement as a means to improve patient care and department operations. The presenter will discuss and raise awareness of the purpose and use of key process improvement methods, and share healthcare examples and templates for each method.



## STAFFING YOUR DEPARTMENT: HOW MANY?

10:25 am – 11:05 am

**Richard M Ford RRT FAARC, San Diego CA**

There is no greater challenge than determining the number of staff to ensure the right things get done right. Managers must use tools to determine staffing needs in order to provide safe and quality care and to match resources with work demand that will justify resources needed to hospital administrators. Concepts will include use of the AARC URM with demonstration of tools that can be applied to quantify the demand for services and the number of staff required.



11:05 am – 11:20 am

**BREAK**

## COST CONTAINMENT IN A CHANGING HEALTH CARE ENVIRONMENT: ARE YOU FOCUSED ON THE RIGHT THINGS?

11:20 am – 12:00 noon

**Cheryl Hoerr MBA RRT CPFT FAARC, Rolla MO**

You've heard the phrase ad nauseum: reduce cost but maintain service and outcomes. While staffing and supplies are large line items in the budget, cutting staff is shortsighted and typically a failed strategy. This presentation will outline some of the challenges of cost containment and present a different perspective on cost containment that you can utilize in your hospital.



Gather at the Hilton  
Santa Fe at Buffalo  
Thunder in  
Santa Fe, NM

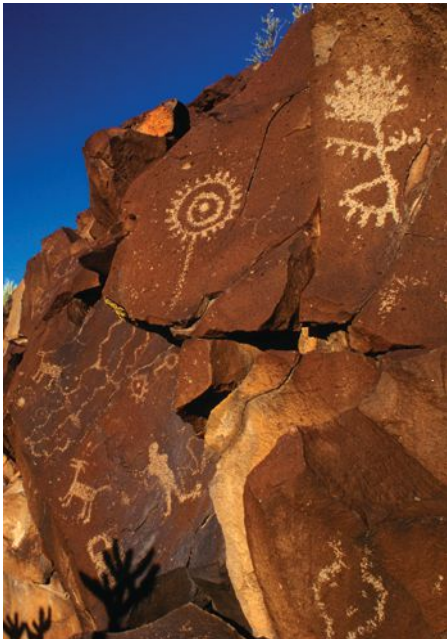
Get in on the Action

The must-attend  
Respiratory Care  
Summer Meetings



expertise  
to gain AARC Summer

take in the history



Online registration is underway now at **AARC.org**

Two significant ways to save:

1. Register early
2. Register for the pre-Summer Forum, Summer Forum and the post-Summer Forum courses.

See page 60 for details.

## Saturday, July 14 (cont)

### EDUCATOR TRACK

1:45 pm – 3:55 pm

**Joseph Sorbello MEd RRT**  
Chair, AARC Education Section/ *Presiding*

### DEVELOPING PROFESSIONALISM IN THE “TROPHY GENERATION”

1:45 pm – 2:25 pm

**Tammy Kurszewski MEd RRT, Wichita Falls TX**

Clinical educators face the challenges of developing professionalism in a generation raised with a sense of entitlement. Respiratory care students frequently present with little work experience and no customer service skills. In the professional health care environment, they often struggle to find the recognition they have to come to expect as part of the “trophy generation.” What strategies can educators utilize to bridge the transition into the health care arena? How do we empower future generations of respiratory therapists while also developing their sense of professionalism? The answer to these and other questions will be addressed in this presentation.



### LEADING UNDERGRADUATE AND GRADUATE RESEARCH TEAMS TO PUBLICATION IN A SCIENCE JOURNAL

2:30 pm – 3:10 pm

**Tom Barnes EdD RRT FAARC, Boston MA**

The presentation will use two student research projects, one undergraduate and the other graduate, to explain how student research is organized and brought to fruition. The presentation will describe the faculty leadership and guidance required, what can be expected from students, and how to integrate the research into their normal program of study. Practical information on matters such as how to schedule data collection so that it doesn't interfere with student schedules, developing the research questions and hypotheses, assigning research responsibilities, and staying on schedule will be discussed. The writing of the research abstract by students will also be covered.



### EXPERIENCES IN RESEARCH AT THE COMMUNITY COLLEGE LEVEL

3:15 pm – 3:55 pm

**Doug Pursley MEd RRT, Springfield MO**

This presentation will highlight and summarize the presenter's involvement with research at the community college level over the past six years. The pros and cons of starting and maintaining a research component to a respiratory care program will be discussed. Examples of past student projects will be presented. Do research projects make for better students? Attend this presentation to find out!



### MANAGER TRACK

1:45 pm – 4:15 pm

**Bill Cohagen BA RRT FAARC**  
Chair, AARC Management Section/ *Presiding*

### PERFORMANCE IMPROVEMENT: TOOLS YOU CAN USE!

**JB Collins III MBA RRT, Winston Salem NC**

This practice session builds upon the information provided in the earlier didactic session and will involve participants in groups of 6-8 to select an opportunity for improvement, practice each method, report out their work, and obtain direct feedback from the audience. Roll up your sleeves and learn by doing. This presentation is anything but your typical podium-delivered presentation!



# Meetings

**Sunday, July 15, 2012**

## PLENARY SESSION

7:30 am – 9:00 am

**Cheryl A Hoerr MBA RRT FAARC**  
Chair, AARC Program Committee/*Presiding*

## JIMMY A YOUNG MEMORIAL LECTURE

Presented by the National Board for Respiratory Care

### *Credentialing Evolution Continues*

**Robert C Shaw Jr. PhD RRT FAARC, NBRC Assistant Executive Director and Psychometrician**

**Kerry E George MEd RRT FAARC, NBRC President**

This program will describe in detail ongoing internal research the NBRC has been conducting for several years resulting in significant changes that the NBRC Board has approved and will be implementing to the CRT and RRT multiple choice examinations and the Clinical Simulation Examination in the future.



## EDUCATOR TRACK

9:10 am – 11:55 am

**Joseph Sorbello MEd RRT**  
Chair, AARC Education Section/*Presiding*

## USING MacGYVER TECHNIQUES AND SIMPLE MODELING TO TEACH BASIC CONCEPTS IN RESPIRATORY CARE

9:10 am – 9:50 am

**Doug Pursley MEd RRT, Springfield MO**

This presentation will focus on the use of simple, minimal resource modeling techniques that can be used to help students grasp basic concepts in respiratory care. Models explaining gas laws, pulmonary compliance, and airway resistance will be discussed. Attendees will be given instructions on how to construct a working ventilator out of garden-variety respiratory supplies.



9:50 am – 10:10 am

**BREAK**

## PROMOTING TEAMWORK AND COORDINATED PATIENT CARE THROUGH INTERPROFESSIONAL SIMULATION

10:10 am – 10:50 am

**Georgianna Sergakis PhD RRT RCP, Columbus OH**

Health care professionals are required to work together as a team to care for patients. However, traditional pre-professional training methods for nursing and respiratory therapy do not usually involve opportunities for interdisciplinary education. Most RT programs now incorporate high-fidelity clinical simulation as it translates well to the clinical practice. Yet, we seldom train simultaneously with other members of the health care team. This presentation will explore the implementation of interprofessional education in simulated, multifaceted patient scenarios and will describe the multiple positive learning outcomes that result.



a touch of tranquility



Enjoy the outdoors . Walk under the stars inhaling flower-scented breezes. What a way to end a day of intense educational training.

## dine in paradise



Santa Fe is the food lover's paradise with its innovative southwestern fare created by award-winning chefs.

Food events take place throughout the year and there are cooking classes too.

## Sunday, July 15 (cont)

### DR. FRED HELMHOLZ EDUCATION LECTURE SERIES

Presented by the Commission on Accreditation for Respiratory Care  
Tom Hill PhD RRT FAARC/*Presiding*

10:55 am – 11:55 am

#### ***Excellence in Respiratory Care Education: Creating an Exemplary RC Program***

**Bill Galvin MEd RRT CPFT AE-C FAARC, Gwynedd Valley PA**

This presentation will identify and explain the three key variables that shape program design. Mr. Galvin will also share results of select variables from successful programs, briefly identify elements of success, and identify the single key ingredient to program and professional success. What are they you ask? You'll have to attend to find out.



### MANAGER TRACK

9:10 am – 11:55 am

**Bill Cohagen BA RRT FAARC**

**Chair, AARC Management Section/ *Presiding***

### DISEASE STATE MANAGEMENT: ARE YOU READY?

9:10 am – 9:50 am

**Mary Hart MS RRT AE-C FAARC, Dallas TX**

Hospitals are being held more "accountable" for patient outcomes, LOS, and readmission rates of patients than ever before. The number of chronic patients being admitted to hospitals is on the rise and having a direct financial impact to organizations. RTs must take this "perfect storm of opportunity" to prove their value to their organization. The speaker will discuss chronic disease aspects and how they impact hospitals. The attendee will also be able to identify areas of opportunity for RTs in chronic disease management and explore new roles for the respiratory therapist.



9:50 am – 10:10 am

### **BREAK**

### **YOU CAN'T PLEASE EVERYONE... OR CAN YOU? DEVELOPING AN EFFECTIVE EDUCATIONAL PLAN FOR RESPIRATORY CARE DEPARTMENTS**

10:10 am – 10:50 am

**Shawna Strickland PhD RRT-NPS AE-C FAARC, Columbia MO**

At the end of this presentation, participants will be able to identify pertinent stakeholders affected by RT department education, discuss applicable adult learning principles, and set goals and objectives. The presenter will identify barriers to effective education among stakeholders, identify ways to engage staff, satisfy accreditation, and avoid duplication of efforts.



### **BE SEEN, NOT OVERLOOKED — 10 VALUE ADDED IDEAS**

10:55 am – 11:55 am

**Richard M Ford RRT FAARC, San Diego CA**

RC departments may only represent 2% of a hospital's workforce, but they play a dominant role by providing care throughout the health care system. RC departments must position their services as being essential to the provision of quality care. So how does one do that? Attend this lecture and identify the Top 10 value added ideas from a seasoned RT manager.



# Meetings

## American Association for Respiratory Care Post-Summer Forum Course Sunday, July 15, 2012 GETTING THE BEST RETURN ON YOUR INVESTMENT: MAXIMIZING PATIENT EDUCATION

1:30 pm – 5:00 pm

**Teresa A Volsko MHHS RRT FAARC/Presiding**

Course capacity limited.

Pre-registration required.

Deadline: Thursday, June 21, or when course is full.

Approved for 3.25 hours of continuing education credits (CRCE).

You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

**Target Audience:** Program Directors, Directors of Clinical Education, Department Managers, and Hospital-based Educators

Students must learn the skills of patient education... the bedside clinician must master it. As the US health care system moves forward with the Patient Protection and Accountable Care Act, department managers must identify new, untraditional roles for the RT that focus on prevention rather than treatment, disease management, and patient education. This Summer Forum post-course will provide the necessary skills to educators and managers on how to develop these skills with students and staff.

1:30 pm – 2:20 pm

**Know Your Audience**

**Sarah Varekojis PhD RRT RCP, Columbus OH**

Understanding the background, beliefs, experiences and preferences of your audience starts the education intervention off on the right foot and goes a long way toward ensuring effectiveness. A variety of educational principles will be presented, including culturally appropriate pedagogy, age-appropriate education, and family-centered education. Common educational encounters will be used to illustrate the application of the above principles.



2:25 pm – 3:15 pm

**Overcoming the Odds**

**Shawna Strickland PhD RRT-NPS AE-C FAARC, Columbia MO**

Information provided within the health care setting does not exist in a vacuum. Issues such as health literacy, anxiety, language, and past experiences can be barriers to effective patient education. This session will identify commonly encountered barriers and provide tips to overcome these issues to help patients become more effective in self-management of their disease processes.



3:15 pm – 3:30 pm

**BREAK**

3:30 pm – 4:20 pm

**Practice What You Preach**

**Sarah Varekojis PhD RRT RCP**

**Shawna Strickland PhD RRT-NPS AE-C FAARC**

**Crystal Dunlevy EdD RRT RCP**

This session will provide an interactive experience for participants to practice techniques for educating patients in a variety of situations. Roll up your sleeves and learn by doing. This presentation is anything but your typical podium-delivered presentation!

4:25 pm – 5:10 pm

**Real World ROI**

**Crystal Dunlevy EdD RRT RCP, Columbus OH**

Today's health care market is becoming increasingly competitive. Information from the small group session will be summarized and presented, along with practical ideas to provide high-quality patient education with an eye toward the bottom line — improving customer/patient satisfaction and decreasing the number of readmissions.



take in the sights



Santa Fe is recognized for its preservation of historic buildings and cultural heritage and traditions. It is also famous for the array of unique wares being sold in the famous Plaza.

out & about



## What To Do and See

### Visit

[http://santafe.org/What\\_s\\_Happening/index.html](http://santafe.org/What_s_Happening/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Things\\_to\\_Do/Historic\\_Sites/index.html](http://santafe.org/Visiting_Santa_Fe/Things_to_Do/Historic_Sites/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Things\\_to\\_Do/Tours/index.html](http://santafe.org/Visiting_Santa_Fe/Things_to_Do/Tours/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Indian\\_Pueblos/index.html](http://santafe.org/Visiting_Santa_Fe/Indian_Pueblos/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Things\\_to\\_Do/Golf\\_Courses/index.html](http://santafe.org/Visiting_Santa_Fe/Things_to_Do/Golf_Courses/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Shopping/index.html](http://santafe.org/Visiting_Santa_Fe/Shopping/index.html)

[http://santafe.org/Visiting\\_Santa\\_Fe/Dine/index.html](http://santafe.org/Visiting_Santa_Fe/Dine/index.html)

[www.santafeopera.org](http://www.santafeopera.org)

[www.folkartmarket.org/](http://www.folkartmarket.org/)

## AMERICAN ASSOCIATION FOR RESPIRATORY CARE

### Summer Meetings Site and Travel Information

**Hilton Santa Fe Golf Resort & Spa at Buffalo Thunder**  
20 Buffalo Thunder Trail, Santa Fe, New Mexico 87506 • (505) 455-5555

#### Hotel Reservations

- **Online** at <http://tinyurl.com/AARC-SantaFe2012>. Enter "AARC" in the Group Code box on the second page.
- **Call** 800-HILTONS (800-445-8667) or 505-455-5555. Refer to Group Code "AARC". Discounted rates are available only through these phone numbers.
- **Room Rate:** \$125 plus 12% tax for single – quad occupancy. Deposit required.
- **Free** parking for AARC hotel guests.
- **Cut-off date** for the AARC's special sleeping room rate is **Thursday, June 21, 2012.**

#### Airline Discounts

Albuquerque International Airport (ABQ) is approximately 1 hour and 15 minutes from the hotel.

Santa Fe Municipal Airport (SAF) is approximately 30 minutes from the hotel.

Discounted fares also apply to family and friends.

#### AMERICAN AIRLINES

- **Discounts** valid for Albuquerque International and Santa Fe Municipal Airport.
- **Online** at [www.aa.com](http://www.aa.com). Enter **9872BQ** in the Promotion Code box (no booking fee).
- **Call** AA Meeting Services at 800-433-1790 and refer to **Authorization Code A9872BQ** (booking fee added).

#### DELTA AIRLINES

- **Discounts** valid for Albuquerque International Airport.
- **Online** at [www.Delta.com](http://www.Delta.com). Scroll over "Planning Tools" and drop down to "Book a Flight". Enter **NM8VC** in the Meeting Event Code box (no booking fee).
- **Call**, or have your travel agent call, Delta Meeting Network at 800-328-1111 (Mon-Fri 7am-7pm CDT). Refer to meeting code **NM8VC** (booking fee added).

#### UNITED AIRLINES

- **Discounts** valid for Albuquerque International Airport.
- **Online** at [www.united.com](http://www.united.com). Enter **ZM83628224** in the Offer Code box (receive an additional 3% off and no booking fee).
- **Call** United MeetingWorks at 800-426-1122. Refer to Z code **ZM83** and Agreement Code **628224** (booking fee added).

#### Ground Transportation

##### AIRPORT SHUTTLE SERVICE

Complimentary hotel shuttle service from the Santa Fe airport is provided by the Buffalo Thunder Casino in the Hilton Santa Fe Resort. They do not provide service from the Albuquerque airport.

- Advance reservations required 10 days prior to arrival.
- **Call** Angela Lujan at 505-819-2292 or 505-819-2111.

# Meetings

learn something new

## Summer Meetings Site and Travel Information (cont.)

### Roadrunner Airport Shuttle



Roadrunner Airport Shuttle is offering a discount on shared ride shuttle service from the Albuquerque International Airport and the Santa Fe Municipal Airport to the Hilton Santa Fe Resort. Discounted prices from ABQ: \$21 per person each way. Discounted prices from SAF: \$15 one way and \$25 round trip per person. Advance reservations required.

- **Call** 505-424-3367 or 505-424-4828, 7 days a week, 8am– 6pm MDT. Mention group name "AARC" to receive the discount.
- The Roadrunner Shuttle booth in the Albuquerque Airport is located inside the terminal, across from Baggage Claim #3.

### Budget RENT-A-CAR

Discounts valid for Albuquerque International Airport.

- **Online** at [www.budget.com](http://www.budget.com). Click "Use an offer code". Enter **U064639** in the BCD code box.
- **Call** 800-772-3773. Refer to Discount Offer Code **U064639**.

### ENTERPRISE RENT-A-CAR



Discounts valid for Albuquerque International Airport and Santa Fe Municipal Airport (off-site).

- **Online** at [www.enterprise.com](http://www.enterprise.com). Enter Discount Rate Code **L9D0194** in the "Optional" code box. On the following page enter AME in the Sign In box.
- **Call** 800-736-8222. Refer to Discount Rate Code L9D0194.

### HERTZ RENT A CAR

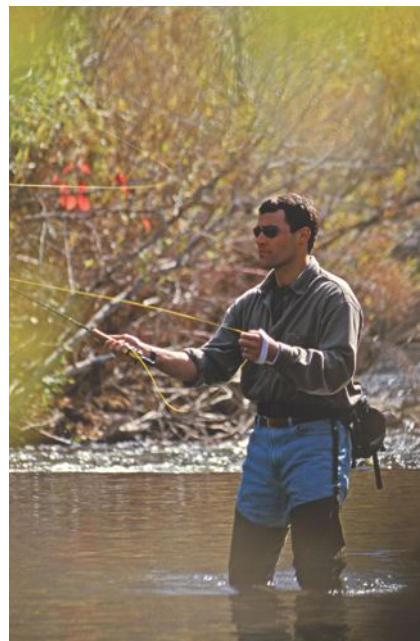
Discounts valid for Albuquerque International Airport, Santa Fe Municipal Airport and on-site in the Hilton Santa Fe Resort.

- **Online** at [www.hertz.com](http://www.hertz.com). Enter **049T0005** in the Convention Number (CV) discount box.
- **Call** 800-654-2240 or 405-749-4434. Refer to Convention Discount Code **049T0005**.

### NM Rail Runner Express

Up for an adventure? Fly to the Albuquerque International Airport then ride the New Mexico Rail Runner Express north to the Santa Fe train depot for \$9 one way. The Buffalo Thunder Casino in the Hilton Santa Fe Resort will pick you up and return you to the depot (10 day advance reservations required for pick up).

- For more info go to [www.AARC.org/education/meetings](http://www.AARC.org/education/meetings).
- **Online** at [www.nmrailrunner.com](http://www.nmrailrunner.com).
- **Call** 866-795-RAIL (866-795-7245) for train info.



Come to the  
Land of  
Enchantment

Gather in the  
beautiful  
scenery of  
Santa Fe, the  
City Different

# REGISTRATION FORM 2012

AARC Summer Meetings • July 2012 • Santa Fe, NM

First/Last Name for Badge \_\_\_\_\_

Credential (check up to three to be printed after your name):  RRT  CRT  PhD  MA  MD  Other \_\_\_\_\_

AARC Member # \_\_\_\_\_ E-mail Address \_\_\_\_\_ @ \_\_\_\_\_

Employer \_\_\_\_\_

Preferred Mailing Address  Home or  Business Daytime Phone (\_\_\_\_) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

## Pre Course

### Building a Simulation Toolbox

Thursday, July 12, 1:00 pm - 5:05 pm

Course capacity is limited. Pre-registration is required.

Deadline: June 21, 2012 or when course is full.

Member Non-Member

Register for Pre-Course only  \$15  \$40

Register for Pre-Course  
and Post-Course  \$25  \$60

## Summer Forum

Friday, July 13, 7:30 am - Sunday, July 15, 12:00 noon

Member Non-Member Student Member

By May 21  \$285  \$415\*  \$90  
After May 21  \$320  \$425\*  \$90

\*Join the AARC and save! If you opt to pay the non-member fee you are entitled to free, automatic 11-month AARC membership. Check here  if you **DO NOT** wish to receive this complimentary membership.

## Post-Course

### Maximizing Patient Education

Sunday, July 15, 1:30 pm - 5:00 pm

Course capacity is limited. Pre-registration required.

Deadline: June 21, 2012 or when course is full.

Member Non-Member

Register for Post-Course only  \$15  \$40

Register for Pre-Course  
and Post-Course  \$25  \$60

## Method of Payment

Check or Money Order enclosed

Charge my  Visa  MasterCard  
 American Express

Name of Card  
Holder (print) \_\_\_\_\_

Credit Card # \_\_\_\_\_

Expiration Date \_\_\_\_\_

Signature \_\_\_\_\_

If paying by credit card you may FAX your registration form to (972) 484-2720.


Mail Registration Form and check or money order, payable to AARC, to:

AARC Summer Meetings  
9425 N MacArthur Blvd, Suite 100  
Irving, TX 75063-4706  
Phone (972) 243-2272

You may register online at [AARC.org](http://AARC.org)

Cancellations must be in writing.  
There will be a 35% handling fee for cancellations received by June 21. No refunds will be made thereafter.

# Raising Asthma Awareness

A close-up photograph of a young girl with dark hair, her eyes closed, blowing into a pink bubble wand. Numerous iridescent bubbles are floating in the air around her, some in sharp focus and others blurred in the background. The scene is brightly lit, suggesting an outdoor setting.

Asthma is one of the most common chronic respiratory conditions in the world and is well recognized by most people on the planet. So why do we need to raise awareness of it? Because recognition is one thing — a good understanding of the disease process is something else.

by Debbie Bunch

On May 1 the world once again turns its eyes on asthma as the Global Initiative for Asthma hosts its **15th Annual World Asthma Day**. But for many respiratory therapists, raising awareness of asthma is an ongoing activity — one they work on throughout the year through a range of activities. We decided to find out how RTs are getting the job done by talking to four AARC members who regularly volunteer their time and talents to ensure more people become aware of asthma and, even more importantly, understand how to bring asthma under good control.

*RTs offer health awareness events in their communities*



Connie Mason shares information on inhalers with a young lady who attended the Healthy Lifestyle Expo.



The clown nose this little girl picked up at another booth didn't stop her from learning proper inhaler technique from Lisa Harrison.

At VCU Medical Center in Richmond, VA, raising awareness of asthma means getting out into the community to take part in health events to educate the public about their medical needs. Lois Rowland, MS, RRT-NPS, FAARC, respiratory therapy education coordinator at the facility, does just that several times a year through health fairs sponsored by VCU and the Virginia Society for Respiratory Care. The most recent event took place in February when she joined fellow AARC member Lisa Harrison, RRT, AE-C, a VCU respiratory therapist, and RC student Connie Mason at the medical center's Healthy LifeStyle Expo.

The trio distributed more than 150 educational hand-

well. Tobacco-dependence treatment was just next door. "Our table was strategically located next to the VCU Tobacco Cessation Program table," says Rowland. "Attendees were able to get their questions answered regarding pulmonary nodules, chronic cough, sarcoidosis, and tobacco-cessation support."

#### Breaking down barriers

Rowland says one thing that always arises during these health fairs is the problems patients have affording their respiratory medications and devices, and that's something she is working to address for the future. "Several people with asthma at health fairs have told me that

they cannot afford the \$50 co-pay for a holding chamber for their inhaler," says the education coordinator. "I hope to gather information to follow up on the lack of holding chamber coverage as well as information re-

garding the logistics of legally allowing patients being discharged to be able to take inpatient inhalers home with them instead of having these discarded."

She believes RTs have a moral obligation to their patients to look past their immediate medical needs to these long-term control issues. "RTs need to try to analyze reasons for lack of patient compliance and attempt to address the barriers," she says. "Lack of knowledge may be due to educational materials not being accessible or on the proper level for understanding. However, non-adherence can also be due to difficulty in schedules and routines for therapy, deliberate non-adherence due to denial of need, or difficulty recognizing symptoms." ■

## Asthma Information from the Lung Health Experts

outs during the event and also conducted one-on-one discussions with visitors about the asthma control test, which was included in the materials. "Approximately five attendees who claimed they had asthma evaluated their condition as 'not controlled' according to this validated test," says Rowland. "They were advised to make an appointment with their physician as soon as possible to discuss the results."

She and her colleagues also made sure attendees who identified themselves as having asthma or COPD left with written instructions on the proper use of metered-dose inhalers with holding chambers. They distributed information on COPD, sleep apnea, and CPAP therapy as



*Lois Rowland had the chance to explain respiratory devices to many attendees during the event.*



The AH! Asthma Health Program at Maine Medical Center in Portland is a referral-based program for both inpatients and outpatients that has received Asthma Self Management Education (ASME) certification from the AARC. One-on-one patient/family education and provider and clinician education combine with community awareness efforts to create a comprehensive initiative that serves some 400 patients a year, many of them from indigent patient clinics where 99% of the patients are on Medicaid or receiving free care.

#### Tail pipe of the jet stream

"It is so important to raise awareness of asthma in our community, particularly among the 10% of our population who have asthma," says Rhonda Vosmus, RRT-NPS, AE-C, the program's asthma education specialist. Noting Portland has been called "the tail pipe of the jet stream" for the emissions it receives from factories in New York, New Jersey, and the Midwest, she says it is essential to "make the public aware of the role adherence, environmental modifications, and asthma self-management training can play in improving one's quality of life." The fact that 18% of the population smoke adds to this need.

One way her program accomplishes its awareness goals is through a partnership with the American Lung Association (ALA) of Maine that's designed to promote cleaner air both in the state and nationally. "I am on the leadership board and have done some advocacy work in Washington, DC, surrounding the Clean Air Act and the effects of poor air quality on the lives of those with asthma and lung diseases in general," says Vosmus. The group also sponsors public service announcements on the value of annual check-ups for asthma, asthma self-management plans, and the annual flu vaccine.

#### Real life stories

This year, AH! Asthma and the Maine ALA are teaming up with the Maine Centers for Disease Control and Prevention, American Lung Association of New England, and Vosmus' own health organization, Maine-Health, to move their agenda even further; and when it comes to government advocacy, they've found there's nothing like a personal patient story to sell the message. For that they've turned to the family of a 12-year-old asthma patient who has taken part in the AH! Asthma program. "Jake Conley was referred to our program initially from an asthma specialist," explains Vosmus. "He and his family have since become spokespeople for our work in the AH! Program and have traveled with us to DC to speak on behalf of many Americans with asthma."

Bringing the patient/family voice to Capitol Hill can go a long way toward convincing legislators to join patients, families, and health care professionals on the asthma team, says the RT. "When people hear Jake and his family speak, they pay attention to what life is

like for someone who has limits on high ozone days." They are also amazed to learn what the self-employed family pays in health care costs in order to ensure their child's asthma remains in good control.

"As I sat in the offices of Sen. Olympia Snowe and Sen. Susan Collins a few months ago with the Conley family and told of their monthly costs for Jake's medications, it was astonishing to see the looks on the faces of our senators," says Vosmus. "It's real-life stories that grab people." ■

## Advocating for the Patient



*Rhonda Vosmus advocates for asthma both in her home state of Maine and in Washington, DC.*



## Taking Asthma Education into the Schools

Back in the 1990s, the AARC sponsored a program called Peak Performance USA (PPUSA) to send respiratory therapists into local schools to deliver asthma education to staff and students. A couple of years ago, the Association updated the program with a new online focus, and it's now being used in classrooms across the country.

Becky Brown, RRT, a respiratory therapist at St. Luke's Hospital in Kansas City, MO, and her colleagues have taken that program and made it their own through an initiative aimed at rallying health professional volunteers throughout the community. The initiative grew out of the hospital's initial experience with PPUSA two years ago. "Several RTs and the respiratory care clinical manager from St. Luke's Hospital initially used this to educate the nurses of the Kansas City public schools in 2010," explains Brown. The program was such a success that they decided to customize it for widespread use in the largest public school in the system, which was identified as having one of the highest rates of asthma-like symptoms within the district.

### 54 slots to fill

"We set to work using information from the PPUSA PowerPoint presentation and whittled it down to 10 slides of content, emphasizing recognition of signs and symptoms, identification of common asthma triggers including indoor air allergens, and medications and tools used to control asthma symptoms," says the AARC member.

Tools discussed in the program include peak flow meters, asthma action plans, and peak flow trend charts. "We also designed a script to help volunteers feel more comfortable presenting, with the help of our department's medical director."

Once the presentation was finalized, volunteer recruitment began. "We identified the need for 54 volunteers in order to provide each classroom with two presenters," says Brown. All

54 slots were filled, with volunteers ranging from respiratory therapists, certified asthma educators, and nurses to pulmonologists, hospital administrators, and a professor of respiratory care. "Each volunteer took a two-hour class educating them on asthma, the PPUSA program, and the student-focused presentation," says Brown.

### Great ideas abound

The volunteers, who came from St. Luke's Hospital, Children's Mercy Hospital, and the KU Medical Center's respiratory care program, brought their own ideas to the table as well, suggesting everything from the use of stuffed animals to illustrate an often forgotten asthma trigger to role playing exercises aimed at helping children understand how to respond when asthma symptoms flare up. "These suggestions were added to the script in order to provide the volunteers with a variety of choices to bring in some creative options for visual aid beyond the PowerPoint," says Brown.

On Jan. 13, this large group of volunteers applied what they had learned during a day-long session at the Foreign Language Academy, delivering much-needed education about asthma to the entire student body. "The event served not only as a bridge from community health systems to a community school, it also created a strong sense of team building from those involved," says Brown.

As of this writing in early spring, Brown and the team were planning to take the program into another school in May to correspond with annual asthma awareness events. "I think that RTs can play a vital role in increasing asthma awareness due to their education and background with pulmonary conditions," says the respiratory therapist. "It is our passion, and we should share it!" ■



*Becky Brown and her colleagues took the AARC's Peak Performance USA Program into a local school earlier this year.*



Canoeing is one of the big attractions at Camp Asthmatopia.

## Let's Go to Camp!

Many of the problems patients have with their asthma are directly related to poor compliance with their medications and care plans, but finding time to deliver all the education they need during busy physician office visits is a challenge. That's where formal asthma education comes into the picture; and Khadija Benouahi, RRT, a clinical assessor in the respiratory care department at Inova Fairfax Hospital in Falls Church, VA, teaches just such a class for children and their families. But Benouahi takes asthma education a lot further than that through her role as director of Camp Asthmatopia, a two-night, three-day camping experience staffed by Inova Health System employees and offered free of charge to children with asthma in her community.

### A godsend for parents

"Children who have never been away from home because of the severity of their asthma are now able to have an amazing experience at Camp Asthmatopia," she says. "All the games and arts and crafts include a great deal of information about asthma triggers, signs and symptoms, and how to emotionally cope with them." Kids go swimming, canoeing, and horseback riding; and a pediatric pulmonologist comes by on the final day of the camp to meet with parents and answer any questions they may be having about their children's asthma.

She explains the camp has been a godsend for parents who once thought their children would never be able to participate in the kinds of activities that most kids take for granted. One mom whose son attended last year's session, for example, wrote her a

letter after camp was over letting her know how much she valued the experience, not just for her child, but for the overall value it adds to the health of the community.

"I am an educated, middle-class mom with access to health care; and the amount of education [my son] learned shocked me," wrote the mother. "This weekend helped him so much, and I am positive it is going to save us a ton of time and money because we will avoid the doctor's office. Now, the more underinsured kids, less-educated parents, etc., you bring in — that is how we start fixing our health care system."

### Confidence booster

Another recent camper with a history of frequent hospitalizations for asthma exacerbations illustrates just how much the camp can help kids with severe asthma overcome their own fears about taking part in physical activities. Benouahi suggested the camp to him and his family during her regular asthma classes after his mother informed her that he was unable to participate in any sports or school activities because of his asthma and was often quiet and timid around other children.

"Well, this 10-year-old boy spent the happiest three days of his life, according to him, at Camp Asthmatopia last year," says the RT. "He participated in all the activities and learned that it is not the swimming and exercising that make him sick but the dust and the cigarette smoking."

As for his parents, they were shocked to learn that he completed the camp without any undue asthma symptoms and was anything but shy and quiet during the session. "The camp helped this child physically and emotionally," says Benouahi. "It gave him confidence to control his asthma and be able to have a perfectly normal life." ■



Benouahi and her fellow volunteers gather for a group shot with the campers.



Khadija Benouahi (left) uses lots of illustrated materials to educate children and families about asthma.



Natalie Napolitano (right) helps her hone her presentation.

## NAEPP: AARC Has *a Place at the Table*

As you can see from these stories, AARC members are busy raising awareness of asthma in many venues. At the Association level, asthma awareness is on the agenda too, in part through the role we play in representing your interests to the National Institutes of Health's National Asthma Education and Prevention Program (NAEPP).

Natalie Napolitano, MPH, RRT-NPS, FAARC, is the AARC's representative to the NAEPP. "I represent the AARC on the NAEPP steering committee," explains the AARC member, who serves as team leader of respiratory care at Inova Fairfax Hospital in Falls Church, VA. "In addition, we are a member of the school subcommittee and have developed educational and protocol documents for schools and school nurses."

The AARC's active involvement on both of these committees ensures respiratory therapists everywhere have a voice in the creation of new documents and re-

visions to existing materials that are used to draw attention to important aspects of asthma care nationwide. It also provides an avenue for the profession to help form the overriding goals of the government agency.

"The goals of the NAEPP are to raise awareness that asthma is a serious chronic disease, ensure recognition of symptoms and adequate diagnosis and treatment from health care providers, and ensure partnership in care among patients, providers, and schools through treatment and educational programs," says Napolitano. "As partners in this mission, we infuse these goals into all programs and initiatives that the NIH sponsors and supports." ■





# A Salute to our 2012 Corporate Partners

Since 1947, the AARC has been leading the effort to advance the respiratory care profession and promote quality respiratory health care. Working with our 50 state organizations, we have successfully advocated for the profession at the federal, state and local level.

The link between the respiratory profession and manufacturers is clear. If respiratory practice expands, so too does the economy for our industry partners.

As health care budgets shrink and patient care becomes increasingly complex, our mutual challenges become greater. The synergy of the corporate partner concept is an effective way to address those needs utilizing our combined skills and resources.





# Industry Watch

## CareFusion, Fisher & Paykel ink deal renewal

CareFusion and Fisher & Paykel Healthcare have signed a three-year renewal of their long-standing agreement providing CareFusion with the exclusive right to distribute Fisher & Paykel Healthcare products in the U.S. hospital market. Under the agreement, CareFusion, through its *AirLife™* Respiratory Consumables business, continues to serve as the exclusive U.S. distributor of Fisher & Paykel Healthcare's respiratory consumable products, including the MR850 Heated Humidification System with *Evaqua™* circuit technology, *AIRVO™* high flow device, *Optiflow™* nasal cannula, and *Flexi-Fit™* noninvasive interfaces.

## FDA approves Vertex Pharmaceuticals CF mutation drug

The FDA has approved the first drug to treat the underlying cause of cystic fibrosis. Ivacaftor, to be marketed as *Kalydeco*, is approved for people with CF ages six and older who have at least one copy of the G551D mutation in the

CF transmembrane conductance regulator gene. The drug targets a defective chloride channel protein in patients with the G551D mutation, enabling that protein to function more efficiently. In studies, patients treated with the drug experienced significant, sustained improvements in lung function and other disease measures compared to those who received the placebo.

## GE Healthcare, Masimo team up for patient monitoring

GE Healthcare and Masimo have announced a long-term agreement under which GE will incorporate Masimo *rainbow®* SET technology into many of GE Healthcare's patient-monitoring products. The companies are combining Masimo's measurement advances with GE Healthcare's patient monitors to enhance bedside clinical decision-making and to improve patient care.

## Discovery Labs gets FDA clearance for ventilator technology

Discovery Laboratories Inc.'s new *Afectair* tech-

nology has received marketing clearance from the FDA. The disposable ventilator circuit-patient interface connector simplifies the delivery of aerosolized medications to critical care patients requiring ventilatory support from either intermittent mechanical ventilation or continuous positive airway pressure. They expect to move the proprietary technology to commercialization later this year.

## Gates Foundation awards University of Louisville TB grant

The University of Louisville recently announced it has received a \$576,800 tuberculosis biomarkers grant through the Bill & Melinda Gates Foundation's Grand Challenges in Global Health Program, an initiative to overcome persistent bottlenecks in creating new tools to radically improve health in the developing world. James E. Graham, PhD, associate professor of microbiology and immunology in the school of medicine, will lead the project, titled "Disposable Sampling Plate and Breath Test to Identify Patients

with Active Tuberculosis." They will evaluate a device prototype developed for sampling volatile components of the breath.

## Captive Technologies names European distributor

Captive Technologies LLC has named FLC Health & Beauty Products of Eindhoven, Netherlands, as exclusive distributor of its products in Europe. The products include a home oxygen distribution kit, a 15-foot length of oxygen supply tubing that automatically coils down to just 14 inches, a three-way carrying bag for portable oxygen cylinders, and a hand tool designed to ease O<sub>2</sub> tubing management and separation.

## BrainStorm reports initial results from ALS study

BrainStorm, an Israeli developer of stem cell technologies to provide treatments for currently incurable neurodegenerative diseases, recently reported its Phase I/II clinical trial for amyotrophic lateral sclerosis is showing progress. Researchers report early clinical follow-up of

patients who have been transplanted with stem cells derived from their own bone marrow and treated with Brain-Storm's NurOwn stem cell technology have shown an improvement in breathing and swallowing ability, as well as muscular strength. The investigators say they hope to bring the trial to the United States sometime this year.

### Ronald McDonald House installs bacteria-killing surfaces

The Ronald McDonald House of Charleston has renovated its facility to replace steel, wood, and plastic touch surfaces with solid, EPA-registered antimicrobial copper-based metals like brass and bronze. Among the high-traffic surfaces that were converted are stair railings, sinks, faucets, tables, locksets, cabinet pulls, and chair arms. The Medical University of South Carolina measured the amount of bacteria on the previous touch surfaces prior to the copper retrofit and will compare the amount of bacteria on the new copper surfaces against their predecessors. Results are scheduled for release in the third quarter of 2012.

### University of Arizona testing unique CF treatment

University of Arizona researchers are testing

a new CF treatment that has previously shown success in clearing the mucus from the lungs of elite racehorses. The VibraVM® uses sound waves to break up mucus. In the human study, researchers are placing the device over the patient's mouth and then plugging the patient's nose so that the sound waves will reach the lungs. In a Phase I study, 10 patients who had lost at least 75% of their lung function were treated with the device, with no evidence of damage. The device will now be tested in more patients in a Phase II trial in which outcomes will be compared with those achieved through the use of a CF vest.

### ACAAI, Teva Respiratory provide free asthma screenings

The American College of Allergy, Asthma and Immunology is once again partnering with Teva Respiratory to bring free asthma screenings to communities nationwide. Almost 130,000 people have been screened since the start of the Nationwide Asthma Screening Program, with half of those screened referred for a diagnosis. Financial support by Teva Respiratory provides the funding for the public education materials, publicity, and resources needed to conduct the screenings. On a local level, Teva representatives help at three out of every four screenings, as well.

### DeVilbiss offers extended warranty on CPAP systems

DeVilbiss Healthcare announces it has instituted a new extended warranty plan for its line of IntelliPAP CPAP systems. The plan lengthens the company's three-year warranty for an additional two years and is available directly from CPAP medical equipment providers. IntelliPAP owners have the option to purchase the two-year extended warranty for a nominal fee at the time of product purchase or up to 180 days from the provider's point of purchase from DeVilbiss Healthcare.

Brief submissions and photos for this column may be sent to Marsha Cathcart, AARC Times editor, at [cathcart@aacr.org](mailto:cathcart@aacr.org). ■

## Are You in Need of Respiratory Products or Services and Don't Know Where To Start?

Log on to <http://buyersguide.aarc.org> and start clicking!

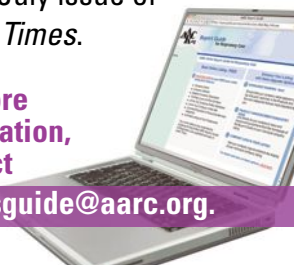
Search categories covering everything from adapters to ventilators.

Type in a product name to find detailed information.

Find contact and product information from the top respiratory care companies in the United States and internationally.

The **AARC Online Buyer's Guide for Respiratory Care** is a free and fully searchable online database that is available 24/7. Plus, the Buyer's Guide is published in the July issue of *AARC Times*.

For more information, contact [buyersguide@aacr.org](mailto:buyersguide@aacr.org).





# New Members

## Welcome to the AARC

### U.S. Members

#### A

Boyd, Felecia, Greenville, Al\*  
Nobles, Greg, Birmingham, Al

Burrow, Vanessa, Benton, Ar\*

Ashoor, Zack, Mesa, Az  
Baker, Angela, Yuma, Az\*  
Bihr, Jennifer, Maricopa, Az  
Blanco, Yanisnelli, Glendale, Az\*  
Brock, Aaron, Mesa, Az  
Chavez, Alejandro, Avondale, Az\*  
Cokley, Andrew, Phoenix, Az  
Cox, Nicholas, Mesa, Az  
Duistermars, Paula, Phoenix, Az\*  
Elsod, Huda, Tempe, Az  
Flores-Quinonez, Josefina, Phoenix, Az  
Fowler, Matt, Phoenix, Az  
Fregoso, Sergio, Glendale, Az  
Fuentes, Ashley, Tempe, Az  
Galaviz, Fernando, Tucson, Az\*  
Giaimo, Deborah, Phoenix, Az  
Goodall, Sydney, Phoenix, Az  
Gustafson, Lori, Chandler, Az  
Hiriscou, Samuel, Phoenix, Az  
Hussaini, Abdullah, Glendale, Az  
Jackson, Brandon, Phoenix, Az  
Jacob, Julia, Phoenix, Az  
Klug, Zach, Mesa, Az  
Koyama, Stephanie, Mesa, Az  
Lapin, Esther, Phoenix, Az  
Larger, Liz, Phoenix, Az  
Loftis, Levi, Phoenix, Az  
Matthews, Katherine, Phoenix, Az  
Miller, Zach, Apache Junction, Az\*  
Mitchell, Tiffany, Mesa, Az  
Morales, Patricia, Apache Junction, Az  
Orr, Danielle, Youngtown, Az  
Peterson, James, Cortaro, Az\*  
Ramos, Ariel, Chandler, Az  
Saini, Kaushal, Gilbert, Az  
Sellars, Sue, Corona, Az\*  
Thomas, Brandon, Tuba City, Az\*  
Valencia, Desiree, Phoenix, Az  
Victor, Pascale, San Tan Valley, Az  
Volkman, Keetan, Mesa, Az

#### C

Allen, Stephanie, Los Angeles, Ca\*  
Amar, Lee, Windsor, Ca\*  
Anderson, Loni, Modesto, Ca\*  
Baker, Lisa, San Diego, Ca  
Bayani, Janet, San Marcos, Ca  
Bovell, Janelle, Madera, Ca\*  
Bruen, Stephen, Yuba City, Ca  
Bui, Nikki, San Diego, Ca  
Campbell, Ian, Antioch, Ca\*

Canary, Jeremy, Menifee, Ca\*  
Capati, Holy-Glo, San Diego, Ca\*  
Cortez, Julie, Woodland, Ca\*  
Dartt, Matthew, El Segundo, Ca\*  
Davis, Ted, Bakersfield, Ca\*  
Dawood, Haitham, Diamond Bar, Ca\*  
De Vera, Jeruzelle, Vallejo, Ca\*  
Edison, Tera, Martinez, Ca\*  
Espinosa, Kassandra, Modesto, Ca\*  
Fletcher, Karen, Los Angeles, Ca\*  
Gesacion, Michael, Huntington Beach, Ca  
Ghosn, Edward, Menifee, Ca\*  
Groza, David, Elk Grove, Ca\*  
Hernandez, Jennifer, San Diego, Ca  
Hsieh, Ming, Seal Beach, Ca  
Huerta, Tanya, Modesto, Ca\*  
Hulme, Alyssa, La Mesa, Ca\*  
Jacobs, Alice, Orange, Ca\*  
Johnson, Tom, San Diego, Ca  
Kibbe, Mark, Riverside, Ca\*  
Kittleson, Monica, Ontario, Ca\*  
Lacar, Carol, San Francisco, Ca\*  
Lei, Van, Oakland, Ca  
Levine, Robert, Yorba Linda, Ca  
Lipe, Carrie, Nevada City, Ca\*  
Lobo, Gina, Newman, Ca\*  
Maddox, James, Orangevale, Ca  
Malamura, Tanya, Ventura, Ca\*  
Marayag, Cherrylyn, Chula Vista, Ca\*  
Martinez, Hector, Riverside, Ca\*  
McCameron, Bert, Rodeo, Ca\*  
Mota Del Real, Hilda, Vacaville, Ca  
Mu, Ying, San Diego, Ca\*  
Patel, Khusboo, Victorville, Ca\*  
Perry, Hank, Fresno, Ca\*  
Perry, Janice, Fresno, Ca\*  
Prang, Lecia, Pleasanton, Ca\*  
Rea, Richard, San Dimas, Ca\*  
Rodriguez, Desiree, Modesto, Ca\*  
Rodriguez, Manuel, Santa Ana, Ca\*  
Rubio, Sarah, Brea, Ca\*  
Sammons, Chris, Yorba Linda, Ca  
Sarabia, Ricky, San Diego, Ca\*  
Sharma, Vishal, Elk Grove, Ca\*  
Shrigley, Terri, Folsom, Ca\*  
Stockstill, Kari, Huntington Beach, Ca  
Tactay, Ismael, Chula Vista, Ca\*  
Tang, Sam Si Qun, South San Francisco, Ca\*  
Taylor, Stephanie, Salida, Ca\*  
Terry, Wayne, Oakley, Ca\*  
Tojino, Alfonso, Chula Vista, Ca\*  
Truong, Michael, Huntington Beach, Ca\*  
Valerio, Frank, Tustin, Ca\*  
Van Paris, Cheryl, Napa, Ca\*  
Vanderwerff, Lorrena, Modesto, Ca\*  
Villanueva, Isaac, Lakeside, Ca\*  
Walker, Matthew, Clovis, Ca\*  
Walters, Michael, El Cajon, Ca  
Weeks-Rodriguez, Maggie, Bakersfield, Ca\*  
White, Thomas, Manteca, Ca\*  
Wong, Samantha, Alhambra, Ca\*  
Wood, Robert, Ridgecrest, Ca\*  
Yanes, Anthony, Folsom, Ca\*

Black, Amanda, Denver, Co\*

Black, David, Arvada, Co\*  
Carbone, Dano, Lakewood, Co\*  
Finger, Misty, Aurora, Co\*  
Infante, Rebecca, Aurora, Co\*  
Noynay, Grace, Denver, Co

Allweier, Dana, Shelton, Ct\*  
Flade, Robert, New Britain, Ct  
Forcelli, Peter, Ridgefield, Ct\*  
Millar, Jennifer, West Haven, Ct\*  
Polak, Erica, Plainville, Ct

#### D

Finnegan, Jacqueline, Milford, De  
Foraker, Jennifer, Dover, De  
Hassman, Margaret, Greenwood, De\*  
Hopper, Jimmy, New Castle, De\*  
Meier, Erin, Milford, De\*  
Wells, Patience, Delmar, De\*

#### F

Adams, Amanda, Gainesville, Fl\*  
Amaya, Shawn, North Lauderdale, Fl\*  
Bantle, Timothy, Gainesville, Fl\*  
Bramah, Elizabeth, Tampa, Fl  
Brasi, Sandra, Youngstown, Fl\*  
Cardenas, Ana, Land O Lakes, Fl  
Carralero, Barbara, Miami, Fl  
Chrapek, Karen, Ormond Beach, Fl\*  
Crowl, Gregory, Cape Coral, Fl\*  
Devine, Daniel, Port Charlotte, Fl\*  
Easterly, Elizabeth, Ocala, Fl\*  
Falco, Patricia, Jacksonville, Fl\*  
Fletcher, John, Tampa, Fl  
Gipson Sr., Joseph, Tampa, Fl  
Guatelli, Ralph, Spring Hill, Fl  
Hall, Christopher, Lakeland, Fl\*  
Harvey, Kimberlee, Apopka, Fl\*  
Hirst, Lindsey, Gainesville, Fl\*  
Hogg, Diana, Ocala, Fl\*  
Humphrey, Michele, Cape Coral, Fl\*  
Knowles, Saundra, Palatka, Fl\*  
Lebel, Amanda, Gibsonton, Fl  
Lucas, Geri, Valrico, Fl\*  
Lynch, Dena, Crystal Beach, Fl\*  
Martinez, Yanet, Tampa, Fl  
Mathew, Geoji, Ocala, Fl  
Moure, John, Tampa, Fl  
Nicholas, Vivian, Tampa, Fl  
Oconnor, Michelle, Ormond Beach, Fl\*  
Orama, Michael, Gibsonton, Fl  
Orwig, Michelle, South Pasadena, Fl  
Pattelena, Lauren, Rockledge, Fl\*  
Perrin, Autumn, Lutz, Fl  
Piquion, Carmelle, Margate, Fl  
Putillion, Kimberly, Ponte Vedra Beach, Fl\*  
Putillion, Richard, Ponte Vedra Beach, Fl\*  
Reeser, Michael, Bokeelia, Fl\*  
Reid, Kimberly, Jensen Beach, Fl\*  
Rivera, Chastity, Sanford, Fl\*  
Rodriguez, Hector, Tampa, Fl  
Rojas, Elio, Miami, Fl\*

Rosario-Rios, Francisco, Wesley Chapel, Fl  
 Rosenthal, Linda, Deerfield Beach, Fl\*  
 Samedí, Ronald, Cape Coral, Fl\*  
 Sayyarah, Harn, Saint Petersburg, Fl\*  
 Smith, Ronda, Ocala, Fl\*  
 Tavadia, Seema, Deland, Fl\*  
 Turner, Sheryl, Tampa, Fl  
 Villafana, Johanna, Orlando, Fl\*

## G

Abdulazeez, Shaheed, Decatur, Ga\*  
 Adams, Angel, Douglasville, Ga\*  
 Caples, Pamela, Lawrenceville, Ga\*  
 Carrauzza, Christine, Tifton, Ga  
 Edmond, Kendrick, Warner Robins, Ga\*  
 Gray, Dawn, Smyrna, Ga\*  
 Griffin, Stephanie, Atlanta, Ga\*  
 Jackson, Zaneta, Atlanta, Ga\*  
 Kahley, Karl, Savannah, Ga\*  
 Lawrence, Linda, Ellijay, Ga\*  
 Lomboy, Michael, Conyers, Ga\*  
 Mallory, Carol, Waycross, Ga\*  
 Redden, James, Decatur, Ga\*  
 Rodriguez, Gretchen, Monroe, Ga\*  
 Snead, Benjamin, Macon, Ga\*  
 Tesfamichael, Tsehay, Stone Mountain, Ga\*  
 Thomas, Marcel, Athens, Ga\*  
 Thomas, Santori, Albany, Ga  
 Wakeham, Debra, Lawrenceville, Ga\*  
 Widner, Ocean, Leesburg, Ga

## H

Ballesteros, Ashley, Waipahu, Hi  
 Bigelow, Terrence, Honolulu, Hi\*  
 O'Regan, Donald, Kailua, Hi\*

## I

Balvanz, Sally, Radcliffe, Ia\*  
 Bell, Luke, Cedar Rapids, Ia  
 Bentley, Bethany, Cedar Rapids, Ia  
 Cruise, Shelby, Cedar Rapids, Ia  
 Dana, Kathleen, Milford, Ia\*  
 Dixon, Kimberly, Urbandale, Ia  
 Dueker, Tara, Cedar Rapids, Ia  
 English, Joseph, Cedar Rapids, Ia  
 Frerichs, Jason, Red Oak, Ia\*  
 Hennefeld, Sara, Urbandale, Ia  
 Hoffman, Mason, Cedar Rapids, Ia  
 Johnson, Jonathan, Clinton, Ia\*  
 Kinred, Jared, Cedar Rapids, Ia  
 Levan, Angela, Swisher, Ia\*  
 Long, Lindsay, Cedar Rapids, Ia  
 Martinek, Thomas, Cedar Rapids, Ia  
 Smith, Jamie, Cedar Rapids, Ia  
 Stokke, Kyle, Red Oak, Ia\*  
 Teichler, Elizabeth, Cedar Rapids, Ia  
 Turner, Nicholas, Cedar Rapids, Ia  
 Wigfall, Tiffany, Cedar Rapids, Ia  
 Zeien, Barbara, Cedar Rapids, Ia

Colvin, Terri, Nampa, Id\*  
 Elstad, Maria, Nampa, Id\*  
 Ettner, Jill, Coeur D Alene, Id\*  
 Jones, William, Ririe, Id\*  
 Martin, Kristie, Idaho Falls, Id\*

Bioseh, Sunny, Chicago, Il  
 Bowder, David, Collinsville, Il  
 De Warns, Megan, Bellflower, Il  
 Devassy, Linto, La Grange, Il\*  
 Dodd, Kaylah, Saint Joseph, Il  
 Doubet, Richard, Peoria, Il\*  
 Erboe, Kenneth, Loves Park, Il\*  
 Fisher, Mose, Bolingbrook, Il\*  
 James, Jennifer, Catlin, Il

Logan, Steven, Warrensburg, Il\*  
 Massip, Lila, River Grove, Il\*  
 McQuality, Brittany, Forsyth, Il  
 Nasser, Elaina Dawn, O Fallon, Il  
 Olsen, Jessica, Gibson City, Il  
 Ortiz, John, Westchester, Il\*  
 Pillars, Jennifer, Rock Falls, Il\*  
 Waldie, Deborah, Chicago, Il  
 Ward, Steven, Chicago, Il\*

Burkett, Frances, Valparaiso, In\*  
 Doneska, Marija, Hobart, In\*  
 Hicks, Justin, West Harrison, In  
 Kemper, Brooke, Fountain City, In\*  
 Kerr, Amber, Terre Haute, In\*

## K

Alexander, Jessica, Meade, Ks  
 Bessette, Ashley, Ulysses, Ks  
 Clugston, Mary, Weir, Ks\*  
 Dehn, April, Gardner, Ks\*  
 Estrada, Kendra, Garden City, Ks  
 Gonzalez, Jessica, Rolla, Ks  
 Hahn, Ashley, Garden City, Ks  
 Lake, Sarah, Lansing, Ks  
 Lawson, Sarah, Overland Park, Ks  
 Lewis, Brian, Liberal, Ks  
 Moser, Gregory, Kansas City, Ks\*  
 Ortiz, Oscar, Liberal, Ks  
 Parish, Justin, Liberal, Ks  
 Rider, Seth, Ulysses, Ks  
 Schone, Michelle, Topeka, Ks  
 Shultz, Dawn, Sublette, Ks  
 Stephany, Downie, Fort Leavenworth, Ks\*  
 Unfred, Brandy, Topeka, Ks

Daudert, Jillian, Oak Grove, Ky  
 Helton, Alice, Salyersville, Ky\*  
 Milby, William, Summersville, Ky\*  
 Nazworth, Steve, Shelbyville, Ky\*  
 Philpot, Kathy, Elizabethtown, Ky\*

## L

Anthony, Misty, Shreveport, La  
 Ashton, Karen, Shreveport, La  
 Bourque, Chaneé, Bossier City, La  
 Grady, Sarah, New Orleans, La  
 Harris, Lakisha, Shreveport, La\*  
 James, Tameko, Shreveport, La  
 Mayfield, Myesha, Shreveport, La  
 Miller, Kevin, Shreveport, La  
 Noguera, Cynthia, Bossier City, La  
 O'Briant, Alicia, Shreveport, La  
 Real, Sharon, Crowley, La\*  
 Sharp, Pamela, Franklinton, La\*  
 Urban, Summer, Shreveport, La

## M

Barrieau, Daniel, Northampton, Ma\*  
 Cassidy, Karen, West Bridgewater, Ma\*  
 Dadrass, Mohammad, Malden, Ma  
 Doucette, Edward, Halifax, Ma\*  
 Farnsworth, Allison, Norwood, Ma  
 Finkelstein, Danielle, Brookline, Ma  
 Lane, Lau, Reading, Ma\*  
 Madaza, Alice, Framingham, Ma  
 Marichal, Lizbeth, Roslindale, Ma  
 Petit Frere, Marline, Dorchester, Ma  
 Purcifull, John, Revere, Ma  
 Salinas, Jorge, Malden, Ma  
 Simpson, Steve, Brockton, Ma  
 Trainor, Chris, Quincy, Ma

Barbarino, Rachel, Baltimore, Md\*  
 Beraki, Eden, Windsor Mill, Md\*

Coles, Shannon, Frederick, Md\*  
 Kazeem, Abiola, Owings Mills, Md\*  
 Martin, Jalyce, Laurel, Md\*  
 Pryor, Sharon, Baltimore, Md\*  
 Wade, David, Middletown, Md\*  
 Welsh, John, Takoma Park, Md\*  
 Williams, Keyana, Baltimore, Md\*  
 Yah, Isaac, Essex, Md\*  
 Zielke, Mary, Pasadena, Md\*

Abdirahman, Ahmed, Portland, Me\*  
 Bilotta, Bradford, Waterville, Me  
 Bissonnette, Lisa, Gardiner, Me  
 Dunton, Molly, Waldoboro, Me  
 Edgar, Raymond, Norridgewock, Me  
 Grant, Matthew, Dvr Foxcroft, Me  
 Hammond, Daphanie, Hermon, Me\*  
 Labonte, Jeremy, Waterville, Me  
 Marinez, Eric, Vassalboro, Me  
 Murdough, Katherine, Kennebunk, Me  
 Potter, Susan, Gardiner, Me  
 Wheeler, Corey, Clinton, Me

Al Emar, Nesreen, Dearborn Heights, Mi  
 Bastuk, Erica, Davison, Mi\*  
 Baumia, Nicole, Erie, Mi  
 Bies, Jessica, Brownstown, Mi  
 Boldy, Kyle, Wyandotte, Mi  
 Chomicz, Matthew, Sterling Heights, Mi  
 Cook, Cyd, Canton, Mi  
 Cutler, Christopher, Flat Rock, Mi  
 Dionne, Joseph, Southgate, Mi\*  
 Donovan, Alison, Macomb, Mi  
 Drummonds, Belinda, Newport, Mi\*  
 Dunbar, Heidi, North Branch, Mi\*  
 Glovack, Elizabeth, Grand Rapids, Mi  
 Griffin, Kimberly, South Haven, Mi\*  
 Grodi, Adrianna, Temperance, Mi  
 Hamilton, Brandon, Flat Rock, Mi  
 Heisler, Molly, Monroe, Mi  
 Henry, Nicole, Sterling Heights, Mi\*  
 Jackson, Johnny, Detroit, Mi  
 Johnson, Laurie, Muskegon, Mi\*  
 Katt, McKenzie, Monroe, Mi  
 Kelly, Vicki, Milan, Mi  
 Kendrick, Janelle, Westland, Mi\*  
 King, Kristie, Azalia, Mi  
 Kleinsorge, Corey, Trenton, Mi  
 Kuhn, Christopher, New Haven, Mi\*  
 Lang, Heidi, Carleton, Mi  
 Ledesma, Jenny, Muskegon, Mi\*  
 Lewis, Robert, Muskegon, Mi\*  
 Lutz, Andrew, Lambertville, Mi  
 Magyar, Richard, Flat Rock, Mi  
 Martin, Margie, Edmore, Mi\*  
 McAvoy, Elizabeth, Carleton, Mi  
 McCann, Stephen, Sterling Heights, Mi  
 McClure, Haley, Temperance, Mi  
 Meteer, Steve, Livonia, Mi\*  
 Murray, Carolyn, Wyandote, Mi  
 Nolan, Shannon, Temperance, Mi  
 Pierce, Jennifer, Iron River, Mi\*  
 Pooley, Julie A., Palmyra, Mi\*  
 Robinson, Travis, Zeeland, Mi\*  
 Sargent, Nicole, Dundee, Mi  
 Scarbrough, Amy, Fremont, Mi\*  
 Schwandt, Gina, West Bloomfield, Mi  
 Servoss, Chelsea, Tecumseh, Mi  
 Slater, Lindsey, Ann Arbor, Mi  
 Smelcer, Collin, Monroe, Mi  
 Sobocinski, Katie, Trenton, Mi  
 Sobocinski, Rick, Trenton, Mi  
 Sousa, Joseph, Dearborn, Mi  
 Spaulding, Dennis, Allegan, Mi  
 Stych, Katie, Hillsdale, Mi  
 Vandermeulen, Caitlin, Whitmore Lake, Mi\*  
 Wasielewski, Jayme, Monroe, Mi  
 Wester, Frances, Dearborn Hgts., Mi\*  
 Williams, Heather, Fenton, Mi

## New Members

Buchanan, Lynn, Willmar, Mn\*  
Decker, Thomas, Rochester, Mn\*  
Filiatrault, Eric, Duluth, Mn\*  
Klante, Susan, Maplewood, Mn\*  
Murray, Kathryn, Saint Paul, Mn\*  
Patel, Kumar, Rochester, Mn\*  
Tschaekofske, Larry, Stillwater, Mn\*

Bargas, William, Springfield, Mo\*  
Boucher, Evan, Bridgeton, Mo  
Copenhaver, Whitney, Odessa, Mo  
Drew, Kelly, Liberty, Mo\*  
Edwards, Tiffany, Saint Louis, Mo\*  
Ellis, Betty, Reeds, Mo\*  
Filer, Holly, Kansas City, Mo  
Fry, Tammy, Gideon, Mo\*  
Garr, John, Saint Joseph, Mo  
Graves, Christine, Raymore, Mo\*  
Groshart, Jamie, Sedalia, Mo\*  
Hawkins, Patricia, Saint Joseph, Mo  
Helms, Travis, Union, Mo\*  
Huggins, Casie, Springfield, Mo\*  
Kirkou, Christina, Arnold, Mo\*  
Kunta, Padmavathi, Ballwin, Mo  
Margo, Amy, Blue Springs, Mo  
Maxwell, Heather, Independence, Mo\*  
McCoy, Denise, Saint Charles, Mo  
Orrin, Wyldwood, Fenton, Mo\*  
Oyeyinka, Adebisi, St Louis, Mo  
Reese, Nichole, Saint Louis, Mo\*  
Romani, Susan, Perryville, Mo\*  
Sands, Erica, Dittmer, Mo\*  
Sapp, Greg Alan, Oak Grove, Mo  
Thornton, Tammy, St. Joseph, Mo\*  
Williams, Gerren, Saint Louis, Mo\*

Ingram, Amy, Jackson, Ms\*  
Walton, Paul, Coldwater, Ms\*

Couvillion, Rebecca, Libby, Mt\*  
Emter, Cornel, Clancy, Mt\*  
Vogel, Barbara, Billings, Mt\*  
Ziska, Nolly, Billings, Mt\*

### N

Boergert, Samantha, Matthews, NC\*  
Collins, Crystal, Burlington, NC\*  
Gillispie, Brian, Winston Salem, NC\*  
Hartman, Megan, Clemmons, NC  
Mathew, Santy, Apex, NC\*  
Patton, Judith, Flat Rock, NC\*  
Pritchard, Karen, Wilson, NC\*  
Ruiter, Jeffrey, Charlotte, NC\*  
Sharpe, Rhonda, Monroe, NC\*  
Vasquez, Jose, Durham, NC\*  
White, Jennifer, Wendell, NC\*  
Willis, Donald, Elizabeth City, NC\*

Bidare, Abdulkadir, Lincoln, Ne\*  
Blodgett, Tamara, Central City, Ne\*  
Turman, Jerry, Lincoln, Ne\*

Caporicci, Anne, Jaffrey, NH  
Drew, Peter, Dover, NH\*  
Ryan, Gary, Weare, NH\*

Allogio, Elizabeth, Sussex, NJ  
Ambio, Sarah, Hackettstown, NJ  
Awad, Mina, North Brunswick, NJ  
Barone, Lori, Westwood, NJ\*  
Bash, Lawrence, Bridgeton, NJ\*  
Beach, Cheryl, Sparta, NJ  
Bishop, Roberta, Cape May Court House, NJ\*  
Black, Roshawnda, Sicklerville, NJ\*  
Blood, Jenni, Bayville, NJ\*  
Burns, Dan, Long Valley, NJ  
Campbell, Joann, Blairstown, NJ  
Codjoe, Charles, Oak Ridge, NJ

Colon, Milagros, East Windsor, NJ\*  
Conley, Cristen, Stanhope, NJ  
Cruz, Rizalino, Nutley, NJ\*  
Dawson, Brian, Williamstown, NJ\*  
Desai, Priti, Passaic, NJ\*  
Duncan, Charles, Old Bridge, NJ\*  
Edward, Lauren, West New York, NJ\*  
Ganly, Jessica, Highland Lakes, NJ  
George, Joji, Springfield, NJ\*  
Gordon, Maryanne, Beachwood, NJ\*  
Hardy, Linda, Wharton, NJ  
Hemner, Brooke, Netcong, NJ  
Jaust, Thomas, Branchville, NJ  
Jose, Roselyn, Union, NJ  
Joseph, Nonceline, Irvington, NJ\*  
Konopka, Marta, Kinnelon, NJ  
Kotliar, Julia, Parsippany, NJ  
Labell, Michele, Stanhope, NJ  
Mobley, Tamakia, Maple Shade, NJ\*  
Oon, William, Gillette, NJ  
Oross, Karoly, Lafayette, NJ  
Osgood, Linda, Lake Hiawatha, NJ  
Peters, Caryn, Lake Hopatcong, NJ  
Petrus, Edit, Denville, NJ  
Pizzelli, Michael, Wenonah, NJ\*  
Poulose, Jacob, Waldwick, NJ  
Reyes, Annie, Wharton, NJ  
Roane, Racheal, Willingboro, NJ  
Scanlon, Colleen, Cinnaminson, NJ\*  
Swift, Janelle, Morris Plains, NJ\*  
Teel, James, Bergenfield, NJ\*  
Vassallo, Nikki, Branchville, NJ  
Wojtak, Jura, Hamburg, NJ

Bowen, Lori, Albuquerque, NM\*  
Santistevan-Salazar, Ellen, Rio Rancho, NM

Alcorn, Susan, Reno, Nv\*  
Alvarez-Otano, Yordanka, Las Vegas, Nv  
Barnes, Aimee, Las Vegas, Nv\*  
Baruch, Marc, Las Vegas, Nv  
Corrales, Anthony, Fernley, Nv\*  
Coyn, Lovely, Las Vegas, Nv  
Durski, Scott, Henderson, Nv  
Fishler, Aaron, Las Vegas, Nv  
Gajete, Sheila, Las Vegas, Nv  
Gibson, Richard, Las Vegas, Nv  
Gomez-Rodriguez, Veronica, Las Vegas, Nv  
Hasbaouy, Mounia, Las Vegas, Nv  
Houser, Shane, Las Vegas, Nv  
Irwin, Holly, Sparks, Nv  
Johnson, Ronnal, Las Vegas, Nv  
Lacger, David, Las Vegas, Nv  
Luong, Nhat, Las Vegas, Nv  
MacDonald, Tom, North Las Vegas, Nv  
Mulamba, Tchimbu, Las Vegas, Nv  
Odegaard, Joel, Las Vegas, Nv  
Parks, Matthew, Las Vegas, Nv  
Percell, David, Henderson, Nv  
Rodriguez, Armando, Las Vegas, Nv  
Romero, Cynthia, Henderson, Nv  
Stevens, Penni, North Las Vegas, Nv  
Timas, Veronica, Las Vegas, Nv  
Vizcaino, Carla, Las Vegas, Nv  
Ward Bzosczie, Judy, Las Vegas, Nv

Bogdan, Ruth, Angola, NY\*  
Booker, Donna, Lancaster, NY\*  
Brunn, Melissa, Silver Creek, NY\*  
Conrad, Tina, Amherst, NY\*  
Cruz, Albert, Valley Cottage, NY\*  
David, Vincent, Richmond Hill, NY\*  
Dyer, Delores, Batavia, NY  
Ford, Lydia, Brooklyn, NY\*  
Glibert, Sheryl, Troy, NY\*  
Guerrant, Monique, Bronx, NY\*  
Josama, Adler, Hollis, NY\*  
Li, Ben, Brooklyn, NY\*  
Mann, Lenny, Hamburg, NY\*  
Molina, Ana, Bronx, NY

Molina, Reina, Bayside, NY\*  
Murphy, Shaun, Rochester, NY  
Palleschi, Paula, Kinderhook, NY\*  
Raby, Shawn, Astoria, NY\*  
Sackoor, Kristie, Lyons, NY  
Schadt, Nicole, Jamesville, NY\*  
Soto, Fernando, Flushing, NY\*  
Stork, Jeffrey, Batavia, NY\*  
Venon, Natalie, Queensbury, NY\*  
Vykhodets, Svetlana, Staten Island, NY\*  
Whitaker, Samantha, Arcade, NY  
Yakubov, Eduard, Rego Park, NY\*  
Yarovenko, Alla, Brooklyn, NY\*

### O

Adamson, Amanda, Cincinnati, Oh  
Barnes, Rickey, Lisbon, Oh\*  
Blazek, Sandra, Brecksville, Oh\*  
Coia, Ashley, Kent, Oh  
Crum, Melanie, Dayton, Oh\*  
Cummings, Megan, Dayton, Oh\*  
Davis, Shanda, Harrison, Oh  
Duclaux, Beth, Hamilton, Oh  
Evans, Brandon, Cincinnati, Oh  
Fuller, Deanna, West Chester, Oh\*  
Guggenbiller, Jamie, Celina, Oh  
Hale, Derhonda, Troy, Oh\*  
Hill, Christopher, Cincinnati, Oh  
Hoesl, Jeff, Cincinnati, Oh  
Hoffman, Nancy, Toledo, Oh\*  
Huff, Laurie, Harrison, Oh  
Hughes, Katie, Cincinnati, Oh  
Iheme, Bena, Saint Bernard, Oh  
Jereb, Allison, Lakewood, Oh\*  
Klaene, Katie, Cincinnati, Oh  
Koster, Ashley, Springfield, Oh\*  
Lamb, Brittanie, Cincinnati, Oh  
Lapp, Deborah, Northfield, Oh\*  
McCright, Priscilla, Streetsboro, Oh\*  
Milliron, Ashley, Warren, Oh\*  
Pillai, Sajay, Beavercreek, Oh  
Rehman, Olivia, Fairfield, Oh  
Roark, Tia, Middletown, Oh  
Rohal, Beth, Ravenna, Oh\*  
Schroeder, Kurt, Hamilton, Oh\*  
Shroats, Rebecca, Prospect, Oh\*  
Smith, Angela, Amelia, Oh\*  
Solomon, Julie, Cincinnati, Oh  
Sosby, Stephen, Harrison, Oh  
Stripling, Helen, Toledo, Oh  
Terry, Anita, Euclid, Oh\*  
Thompson, Mary Jo, Bloomingdale, Oh\*  
William, McDonald, Milford, Oh\*

Cook, Donna, Yukon, Ok\*  
Ross, Katrina, Broken Arrow, Ok\*  
Smith, Judy, Edmond, Ok\*

Chambers, Tonya, Tigard, Or\*  
Kurfessa, Dureti, Hillsboro, Or\*  
Poe, Lisa, Forest Grove, Or\*  
Ramirez, Ben, Portland, Or\*  
Spahn, Jason, Saint Helens, Or\*

### P

Applegate, Erin, Felton, Pa\*  
Artman, David, Pittsburgh, Pa\*  
Banyai, Jamie, Pittsburgh, Pa\*  
Bennawit, Megan, Lancaster, Pa\*  
Bercosky, Adam, Beallsville, Pa\*  
Brown, Kenya, Philadelphia, Pa  
Cacia, Teresa, Phila, Pa\*  
Collado, Heida, Philadelphia, Pa  
Dougherty, Jamie, York, Pa\*  
Fink, Michael, Lansdale, Pa  
Flohr, Robin, Dover, Pa\*

Fry, Tory, Philadelphia, Pa  
 Gallagher, Kyle, Philadelphia, Pa  
 Garrison, Clintonette, York, Pa\*  
 Gengler, Allison, West Chester, Pa\*  
 Hnatkovich, George, Hastings, Pa\*  
 Jobba, Kaitlin, Warminster, Pa  
 Jones, Mindy, Oakdale, Pa\*  
 Kinnard, Robert, Philadelphia, Pa\*  
 Kulak, Laurie, Mountain Top, Pa\*  
 Lee, Jean, Luthersburg, Pa\*  
 Mangle, Jennifer, Philadelphia, Pa  
 Marshall, Jeff, Pittsburgh, Pa\*  
 Mathew, Viji, Philadelphia, Pa  
 McFadden, Matthew, Philadelphia, Pa\*  
 Mellinger, Philip, Ephrata, Pa\*  
 Miller, Jolen, Reading, Pa\*  
 Nguyen, Nora, Philadelphia, Pa  
 Patel, Hardik, Bensalem, Pa  
 Rajkumar, Andre, Lansdowne, Pa  
 Rocco Jr, Dominick, Throop, Pa\*  
 Rossillo, Brittany, Ridley Park, Pa  
 Shaughnessy, Beth, Monroeville, Pa\*  
 Sheppard, Lenora, Philadelphia, Pa\*  
 Smith, Starlett, Philadelphia, Pa  
 Smolen, Lauren, Philadelphia, Pa  
 Stout, Anthony, Plymouth Meeting, Pa\*  
 Tailor, Sejal, Philadelphia, Pa  
 Turley, Mark, Pittsburgh, Pa\*  
 Varhalmi, Teresa, Philadelphia, Pa  
 Welsbacher, Michelle, Imperial, Pa\*  
 Wildasin, Kelly, Marietta, Pa\*

## R

Bailey, Ell, Providence, RI\*  
 Tripp, Jaclyn, Westerly, RI\*

## S

Angus, Robin, Irmo, SC\*  
 Crum, Ophelia, Orangeburg, SC\*  
 Frizelle, Patrick, Charleston, SC  
 Harvin, Monique, Columbia, SC\*  
 Hills, Gary, Charleston, SC  
 Kolodziej, Christine, Moncks Corner, SC  
 Neideffer, Casey, Summerville, SC  
 Pence, Kathryn, Summerville, SC  
 Ware, Brittany, Newberry, SC  
 Williams, Mariah, Goose Creek, SC

Mollman, Sonya, Yankton, SD\*  
 Schoolmeester, Jessica, Sioux Falls, SD\*

## T

Boman, Tina, Clarksville, Tn  
 Bostwick, Kandy, Clarksville, Tn\*  
 Burns, Pecola, Memphis, Tn\*  
 Crotts, Sara, Clarksville, Tn  
 Davis, Melissa, Clarksville, Tn  
 Dove, Bernard, Clarksville, Tn  
 Fernandez, Mary-Ann, Clarksville, Tn  
 Frasier, Javonna, Clarksville, Tn  
 Gracia, Kathleen, Lakeland, Tn\*  
 Grecol, Jodi, Kingsport, Tn\*  
 Hutchison, Andrea, Clarksville, Tn  
 Kafka, Aneika, Clarksville, Tn  
 Koffer, Lori, Clarksville, Tn  
 Lockhart, Moses, Memphis, Tn\*  
 Marzette, Kimberly, Memphis, Tn\*  
 McClendon, Delois, Clarksville, Tn  
 McGee, Amberleigh, Clarksville, Tn  
 Neer, Madeline, Clarksville, Tn  
 Peavie, Christopher, Clarksville, Tn  
 Penland, Ashleah, Clarksville, Tn  
 Roper, Sarah, Tennessee Ridge, Tn  
 Schaumburg, Wendy, Cordova, Tn\*  
 Smith, Dawn, Clarksville, Tn

Thompson, Clitha, Nashville, Tn  
 Tomany-Harris, Antoinette, Clarksville, Tn  
 Whaley-Cogar, Petra, Clarksville, Tn  
 Wilson, Sarah, Clarksville, Tn

Abraham, Saju, Lewisville, Tx\*  
 Alexander, Maricel, Wylie, Tx\*  
 Beal, Earl, Houston, Tx\*  
 Berry, Rachel, Beaumont, Tx\*  
 Bosley, Robert, San Antonio, Tx\*  
 Byfield, Michael, Euless, Tx\*  
 Chavez, Hilda, Midland, Tx\*  
 Colburn, Scott, McKinney, Tx\*  
 Cruz, Elanor, Cypress, Tx\*  
 Curry, John Blake, Odessa, Tx\*  
 Dubois, Roger, San Antonio, Tx\*  
 Franks, Lindsey, Kingwood, Tx  
 French, Amy, Spring, Tx\*  
 Gardner, April, Haslet, Tx\*  
 Ghebremicael, Abraham, Missouri City, Tx\*  
 Hall-Durazo, Shana, Houston, Tx\*  
 Hellmann, Damian, Frisco, Tx\*  
 Henry, Kimberly, Benbrook, Tx\*  
 Horn, Jill, Dallas, Tx\*  
 Ivins, Michael, Idalou, Tx\*  
 James, Ashley, Houston, Tx\*  
 Johanson, Edward, Anderson, Tx\*  
 Jordan, Jessica, Fort Worth, Tx\*  
 Kigigha, Gladys, Fort Worth, Tx\*  
 Lane, Marlene, Sugar Land, Tx\*  
 Leach, Mark, Corpus Christi, Tx\*  
 Maddox, Janna, Kerens, Tx\*  
 Mathew, Rubin, Irving, Tx\*  
 Minor, Melinda, Hewitt, Tx  
 Moore, Sheila, Houston, Tx\*  
 Nick, Sara, Denton, Tx\*  
 Oltjen, Bret, Temple, Tx\*  
 Patel, Sapna, Dallas, Tx  
 Pena, Rebecca, Richardson, Tx\*  
 Pittalagua, Kimberly, Bartlett, Tx\*  
 Prasai, Bhagwati, Carrollton, Tx\*  
 Thompson, Monica, Spring, Tx  
 Tremblay, Tammy, Odessa, Tx\*  
 Turnbow, E. F., Lubbock, Tx\*  
 Varghese, Joseph, Carrollton, Tx\*

## U

Bosler, Ann, North Ogden, Ut  
 Greenwood, Christopher, Layton, Ut  
 Guernsey, Alexis, Pleasant Grove, Ut  
 Kleinman, Zach, Orem, Ut  
 Meacham, Hailey, Layton, Ut  
 Perez, Aleena, Provo, Ut  
 Thomson, Tracey, Layton, Ut

## V

Carhart, Elliot, Roanoke, Va\*  
 Carico, Valeria, Salem, Va\*  
 Davis, Kelly, Chesapeake, Va\*  
 Dickerson, Christine, Rocky Mount, Va\*  
 Dumka, Marie, Virginia Bach, Va  
 Encisa, Rommel, Portsmouth, Va\*  
 Gebretensai, Mekdes, Alexandria, Va  
 Kapelski, Jared, Charlottesville, Va\*  
 Le, Phuong, Clifton, Va\*  
 Scott, Robin, Glen Allen, Va\*  
 Shelton, Johanna, Pittsville, Va\*  
 Stanton, Emily, Fairfax, Va\*  
 Wheeler, Thomas, Lovettsville, Va\*

## W

Angel, Rodger, Spokane, Wa\*  
 Avariants, Shalom, Fife, Wa  
 Blatnik, David, Battle Ground, Wa\*  
 Buchanan, Teri, Yakima, Wa\*

Deano, Crystal, Auburn, Wa  
 Do, Luan, Federal Way, Wa  
 English, Amy, Shoreline, Wa\*  
 Ferrer, Aileen, Issaquah, Wa  
 Frederick, Ashley, Federal Way, Wa  
 Fritsch, Jamon, Seattle, Wa  
 Goforth, Sheila, Valley, Wa\*  
 Harstad, Christine, Auburn, Wa  
 Hathaway, Randolph, Renton, Wa  
 Hattell, Alison, Olympia, Wa  
 Higley, Douglas, Everett, Wa  
 Hill, Jeremiah, Marysville, Wa\*  
 Irwin, Tiffany, Mukilteo, Wa  
 Jones, Dominique, Seattle, Wa  
 Kachmarchik, Artur, Auburn, Wa  
 Kachmarchik, Regina, Auburn, Wa  
 Kaur, Harpreet, Kent, Wa  
 Lozano, Hector, Federal Way, Wa\*  
 Nesteruk, Miroslava, Burien, Wa  
 Ozment, Laura, Monroe, Wa  
 Patel, Snehaben, Seatac, Wa  
 Peterson, Megan, Maple Valley, Wa  
 Polansky, Melissa, Puyallup, Wa\*  
 Price, Rachel, Seattle, Wa  
 Rosenberg, Kyla, Tacoma, Wa  
 Saab, William, Seattle, Wa  
 Saunders, Kara, Seattle, Wa  
 Simescu, Emily, Seattle, Wa\*  
 Steadman, Billi Jo, Orting, Wa  
 Thompson, Lisabeth, Everett, Wa  
 Tsvyan, Julia, Kent, Wa  
 Vander Veen, Janet, Des Moines, Wa  
 Voight, Aaron, Mountlake Terrace, Wa  
 Walter, Kelsey, Bonney Lake, Wa  
 Welch, Kate, Port Angeles, Wa\*  
 Wilkie, Will, Olympia, Wa  
 Wilton, Christine, Seattle, Wa  
 Wright, Brittany, Kent, Wa

Barnes, Laurie, Stoddard, Wi\*  
 Czarniak, Beata, Armstrong Creek, Wi\*  
 Freudenreich, Anja, Milwaukee, Wi\*  
 Geboy, Sara, Greenfield, WI  
 Giannopoulos, Nicole, Germantown, WI\*  
 Howard, Yulonda, Milwaukee, Wi\*  
 McNeal, Thomas, Monona, Wi\*  
 Parker, Nicholas, Grafton, Wi\*  
 Penn, Brittany, Green Bay, Wi  
 Wright, Lakasha, Milwaukee, Wi\*

Bryant, Katrina, Salt Rock, WV\*  
 Curry, Christopher, Logan, WV  
 Feye, Destinee, Williamson, WV  
 Hicks, Donia, Williamson, WV\*  
 Page, Lisa, Moundsville, WV\*  
 Parsons, Sherri, Davisville, WV\*  
 Stepp, Nicklaus, Varney, WV  
 Sterling, Erin, Inwood, WV\*  
 Taylor, Caitlin, Grafton, WV\*

Hamblin, Crystal, Green River, Wy\*

## Military Members


Dowell, Amanda, Whiteman AFB, Mo\*

## International Members

Jerayed, Sami, Alahsa, Saudi Arabia  
 Dinfotan, Gregory, Abu Dhabi, United Arab Emirates  
 Naredo, Donald Pete Oliver, Al Ain, United Arab  
 Emirates  
 Prost, Allan, Calgary, Ab, Canada  
 Virdi, Pritpal, Edmonton, Ab, Canada

# Marketplace

Featuring information on products and equipment from manufacturers




**Aerogen Continuous Nebulization Tube Set**

Providing a Safe Solution for Continuous Nebulization

- Non-Standard Luer Connectors
- Unique Blue Color-Coded Tubing

An Accessory to the Aereneb Solo Vibrating Mesh Nebulizer



[www.aerogen.com](http://www.aerogen.com)  
Phone: 866.423.7643

**SmartVest®**  
AIRWAY CLEARANCE SYSTEM

Electromed, Inc. presents its patented **SmartVest®** Airway Clearance System that uses HFCWO proven to clear the lungs of excess mucus, improve lung drainage and reduce lung infection. The **SmartVest®** is portable, programmable, and multi-positional, assuring patient ease and convenience. Electromed, Inc. has earned The Joint Commission's Gold Seal of Approval.




**ELECTROMED, INC.**  
Creating superior care through innovation™

THE INNOVATIVE LEADER IN  
**AIRWAY CLEARANCE**

1-800-462-1045  
[www.SmartVest.com](http://www.SmartVest.com)


**Blom®** Tracheostomy Tube System



Blom Tracheostomy Tube System is an innovative solution for the tracheostomized patient. Our Standard, Subglottic Suctioning, Speech and LPV Inner Cannulas are used with our Blom Tracheostomy Tube to provide better patient care.

- Subglottic Suctioning Cannula is a Disposable Inner Cannula for suctioning the secretions above the cuff of the Blom Trach Tube
- Blom Speech Cannula is designed to allow speech for ventilator patients that require a fully inflated cuff
- LPV™ (Low Profile Valve) allows non-vented patients to speak without the use of finger occlusion

Visit [www.Pulmodyne.com](http://www.Pulmodyne.com) for more information.



... bringing change to life®

The new Onyx® Vantage 9590 finger pulse oximeter.

**Accuracy you can act on™.**



- 6,000 spot checks
- Lead and latex free
- Made in the USA
- 4-year warranty



[www.onyxvantage.com](http://www.onyxvantage.com)




**Save O<sub>2</sub>... Save Money!**

Instrumentation Industries, Inc. **O<sub>2</sub> Instant Flow Valves** provide immediate oxygen flow when a 3oz. (90g) or heavier hyperinflation bag is lifted from the lever arm. Replace the bag and the flow stops. Available in Flowmeter, Pole, and Rail mount models.

Visit [www.iiimedical.com](http://www.iiimedical.com) for more info.




**Instrumentation Industries, Inc.**  
1-800-633-8577  
[www.iiimedical.com](http://www.iiimedical.com)



**QuickLung®**

No other test lung performs with this precision and versatility at this price.


Call 800.583.9910 or visit [ingmarmed.com](http://ingmarmed.com)



**MASIMO**

Introducing **Rainbow Acoustic Monitoring™**

Respiration Rate Monitoring That Works Where and When You Need It



[www.masimo.com](http://www.masimo.com)  
800-257-3810

© 2011 Masimo Corporation. All rights reserved.

**HT70<sup>®</sup> Plus**

**More Capability! More Features!**



**Newport MEDICAL**

800.451.3111  
[www.ventilators.com](http://www.ventilators.com)

► Press releases and photos on new products are welcome. Send to Marsha Cathcart, AARC Times editor, at [cathcart@aac.org](mailto:cathcart@aac.org).

# Make a Difference in Patient Care

## When You Enhance Your Knowledge of Alpha-1 Antitrypsin Deficiency

More than 90,000 Americans are estimated to have Alpha-1 Antitrypsin Deficiency (Alpha-1). Since it is associated with COPD, you can play an important role as a respiratory therapist in its identification and treatment. This online course from the AARC is aimed at significantly improving your knowledge of this under-recognized disease. It will be a useful tool as you diagnose and care for patients with Alpha-1.

**NEW ONLINE COURSE FROM THE AARC!** 

### Emerging Roles for the Respiratory Therapist in Alpha-1 Antitrypsin Deficiency

***This course includes:***

- ▶ Definition and causes of Alpha-1
- ▶ Clinical manifestations of Alpha-1
- ▶ Genetics of Alpha-1
- ▶ Epidemiology and detection of Alpha-1
- ▶ Optimal management of COPD in general
- ▶ Augmentation therapy for Alpha-1
- ▶ Emerging therapies for treating Alpha-1
- ▶ The key role of the respiratory therapist in diagnosing and treating Alpha-1

Earn 3.0  
CRCE® credits  
when you complete  
this online course  
and pass the  
accompanying  
test.

***Presenters:***

Charlie Strange, MD  
James K. Stoller, MD MS FAARC  
Robert Sandhaus, MD PhD



Presented by  
the American  
Association for  
Respiratory Care



Sponsored in part  
by an unrestricted  
educational grant  
from Alpha-1  
Foundation

### *Emerging Roles for the Respiratory Therapist in Alpha-1 Antitrypsin Deficiency Online Course*

**NEW IN 2012!**

**Nonmember Price \$50.00  
MEMBER PRICE \$25.00**

Member  
Savings  
\$25

**Register at  
[www.aarc.org/education/aarc\\_crce/](http://www.aarc.org/education/aarc_crce/)**

Visit [www.aarc.org/education/aarc\\_crce/](http://www.aarc.org/education/aarc_crce/) for all AARC continuing education courses.



# RC Currents

IN THE NEWS

## ► Call for Volunteers: RTs Needed To Serve the Profession

by George W. Gaebler, MEd, RRT, FAARC

In planning for my upcoming term as AARC president, I realize it's important to receive vital assistance from my colleagues — AARC members — in order to bring to fruition everything the AARC and the patients we serve need us to accomplish during my presidency. To that end, I am asking you to volunteer your time and expertise to your professional organization. Volunteering not only facilitates our profession and Association's growth, it also presents you, as the volunteer, with the opportunity to develop and advance your leadership skills, increase your professional contacts, and give back to the profession and the patients you serve.

Volunteers have always been the heart and soul of the AARC and its leadership. Our strength and advancement comes from the support volunteers provide toward the betterment of their patients, colleagues, and our profession. Many people like you need and use the professional tools the AARC provides for career advancement. Why not get in on the ground floor and collaborate with your fellow RTs to develop new tools to help RTs continually improve and grow as health care professionals?

We need you to volunteer your expertise and skills to work on various committees so that the necessary, important work of the Association is accomplished. AARC Executive Office staff members strongly support the respiratory care profession each year. However, members who volunteer to serve on committees, accept appointments, or offer their time and assistance in a variety of ways are truly the backbone of this profession.

There is enormous momentum and potential for the profession. While no one individual can accomplish all the challenging goals ahead, it's clear that dedicated respiratory therapists supporting the AARC's efforts can make vast strides toward assuring quality patient care across the continuum and securing our profession's place in our ever-changing health care system.

Many exciting projects are planned for the next few years, but more ideas from AARC members are always welcome to maintain a constant flow of creativity and energy for what we can do as a collective. We are always looking for specific projects and activities our Association should invest in so we can promote the healthy future of our profession. In light of the ever-increasing duties and responsibilities of respiratory therapists, what types

of educational and informational needs do you have, and how can the AARC best address your needs?

This is your Association, and now is the time to step forward. A balance of experienced and new members of the profession is needed on all our committees; it is this special mixture that not only makes it possible for the AARC to mentor in new talent but also ensures the future of the respiratory therapist in the health care environment as it goes through some of the most sweeping changes in history.

So consider this a friendly challenge to each of you in the respiratory care community to consider how you can help the patients we serve, our profession, and the Association. Please take time now to consider volunteering to serve your Association and your profession. And network with your fellow AARC members as well — perhaps

someone active in your state society whom you believe could also contribute a special talent or service to the AARC. Encourage them to contact me so that we can capitalize on the talent of our Association membership.

Write to: President, AARC, 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063; or email me via [kuykendall@aacr.org](mailto:kuykendall@aacr.org). Tell me how you would like to serve and provide a copy of your résumé so I can consider how to best use your expertise.

Together we can continue to make milestones in the respiratory care profession. Thank you for supporting your professional association. I look forward to hearing from you soon. ■

George Gaebler, MEd, RRT, FAARC, is the director of respiratory care at Upstate Medical University in Syracuse, NY, and president-elect of the AARC.



## Educators, Help Recognize Outstanding Students

Educators, please share the following information with your students.

The American Respiratory Care Foundation (ARCF) is pleased to announce that we are now accepting applications for our education awards.

Deadline for all applications is **June 15, 2012**.

The ARCF offers awards to students who are currently enrolled in accredited respiratory care education programs and to respiratory therapists who are pursuing an advanced degree. Awards include registration and airfare for AARC Congress 2012. For more information, log on to [www.arcfoundation.org/awards/](http://www.arcfoundation.org/awards/). ■



## How Do They Do That in Namibia?

AARC is searching for City Hosts and International Fellows for our 2012 International Fellowship Program. Since 1990, health professionals from 50+ countries have shared experiences, knowledge, and lasting friendships through this exceptional program. The three-week program takes each participant to two host U.S. cities and concludes with attendance and acknowledgment at the AARC Congress.

Show off your city and your hospitality skills to an exciting group of respiratory professionals from around the world through the International Fellowship Program. Provide the visiting fellows with a quality educational experience and give them the opportunity to observe respiratory care in a wide variety of settings. See [www.aarc.org/resources/international\\_fellows/](http://www.aarc.org/resources/international_fellows/) for more information. The deadline for applications is **June 1, 2012**. ■



## AARC Leaders Attend Meetings

Throughout the year, AARC leaders and members of the Executive Office staff attend meetings of the Association's state societies as well as other special meetings. In addition to making AARC representatives available for speaking engagements at meetings, the Association funds a special program to help some state societies partially pay for the travel costs of the speakers. Below are some activities AARC representatives are involved in:

### Karen Stewart, AARC President

- Presented Update 2015 at the High Country Respiratory Symposium in Blowing Rock, NC.

### Richard D. Branson, Associate Editor, RESPIRATORY CARE

- Representing the AARC at CONCERT, a COPD planning meeting in Bethesda, MD.

### Sam Giordano, AARC Executive Director

- Speaking on the Future of the RT Profession at the 4th International Respiratory Care Summit in Xi-an, China.

## Enter the 2012 AARC Photo Contest

AARC *Times* is looking for creative members to enter our AARC Photo Contest. Winners will receive a free one-year membership renewal and have their photo entered into our Photo-of-the-Year Contest with the chance of it being chosen to appear on the February 2013 cover. For instructions and guidelines, select the AARC *Times* icon on [www.AARC.org](http://www.AARC.org) and click on the "Photo-of-the-Year Contest" link. Deadline is Oct. 1, 2012. ■



## Contribute to Writer's Corner

AARC *Times* is currently considering brief stories from AARC members for publication in the Writer's Corner section of "RC Currents." Submissions should be under 500 words and contain a cover letter with the member number, contact information such as phone and fax numbers, and email address. Send submissions to [cathcart@aarc.org](mailto:cathcart@aarc.org) with "Writer's Corner" in the subject line. ■

## Members, Send Us Your Human Interest Stories

Have you been active in a ventilator-dependent kids' summer camp? Have you helped an elderly patient in need? Have you saved a life outside of a health care facility? *AARC Times* is always searching for stories from AARC members that relate special experiences.

If you have a human interest story to share with our readers, please contact *AARC Times* Editor Marsha Cathcart at [cathcart@aacr.org](mailto:cathcart@aacr.org). ■

## Heat May Not Be Enough for Premies with Hypoxemia

Premature infants have long been kept in incubators in the NICU to keep them warm. New research from investigators at Aurora St. Luke's Medical Center and the Medical College of Wisconsin in Milwaukee suggests an opposite approach may be better for infants at risk for hypoxia.

The study was conducted in rats that were either two or eight days old, ages chosen to correspond to critical periods of human neurological development in premature infants deemed vulnerable to oxygen deprivation. Litters of these pups in each group were divided into three groups. One breathed room air with normal levels of oxygen and was kept warm at normal body temperature with a heating pad; one was exposed to air with about a third of typical oxygen levels and allowed to spontaneously cool; and a third was exposed to low-oxygen air, but kept warm at normal body temperature. They were monitored for levels of glucose, insulin, and other proteins and hormones in the bloodstream over a three-hour period.

Results showed those in the younger age group who were exposed to hypoxia and heat had dramatic spikes and dips in insulin, with insulin quadrupling over the first hour then falling dramatically by the third. In the older animals, glucose rose over the first hour then fell significantly below baseline by the third. Although hypoxia alone caused significant changes in glucose and insulin concentrations in both younger and older animals, these effects weren't as pronounced as those seen when heat was added.

The authors conclude that keeping the animals warm may have encouraged swings in blood sugar that increased metabolic and physiologic demands and decreased the amount of glucose available to tissues, factors that could lead to a variety of problems, including neurological damage. "We hope that our studies in the neonatal rat will translate to appropriate studies and guidelines for the control of body temperature in the hypoxic newborn," they write.

The study was published in a recent issue of the *American Journal of Physiology — Regulatory, Integrative, and Comparative Physiology*. ■

## C-Section Raises RDS Risk in SGA Infants

Babies who are small for their gestational age (SGA) are more likely to develop respiratory distress syndrome (RDS) if they are delivered by cesarean section, finds a new study conducted at Yale School of Medicine. The investigators compared outcomes for 2,885 preterm SGA infants. Those born prior to 34 weeks via cesarean section had higher odds of RDS than those born vaginally at similar gestational ages. The increased risk persisted even after the researchers adjusted their findings to take maternal age, ethnicity, education, primary insurance payer, pre-pregnancy weight, gestational age at delivery, diabetes, and hypertension into account. The study was presented at a recent meeting of the Society for Maternal-Fetal Medicine. ■



## Request for OPEN FORUM Abstracts at AARC Congress 2012

The AARC invites you to submit abstracts for the OPEN FORUM at AARC Congress 2012. Considered by many to be the premier event at the AARC Congress, the OPEN FORUM is your opportunity to gain national and international recognition for your research in cardiorespiratory care by submitting an original abstract for presentation at AARC Congress 2012 and having it published in *RESPIRATORY CARE*. The deadline to submit abstracts for the OPEN FORUM is June 1 at <http://aacr2012.abstractcentral.com/>. ■



The 58th International Respiratory Convention & Exhibition

## ► Strange But True...

**Don't sleep on it:** Staying awake after experiencing an unsettling or traumatic event could be a good idea. Researchers from the University of Massachusetts Amherst find sleeping immediately following such an event helps to protect the event in a person's memory. In their study, people who slept after viewing unsettling pictures had heightened emotional responses when confronted by them a second time.



**Explosive puff:** A Florida man who was trying to kick the habit by using an e-cigarette got more than he bargained for. A faulty battery inside the device caused it to explode while he had it in his mouth, knocking out all of his teeth and part of his tongue. The explosion also caused a fire in the room. E-cigarettes are currently unregulated by the FDA, but some state governments are considering regulation.

**To breathe it... or not:** Most people get their daily hit of caffeine through a warm or cold beverage. But a company named "Breathable Foods" is taking the stimulant directly to the lungs via an inhaled caffeine device called the "AeroShot" that's being marketed in Massachusetts and New York. The product is currently under FDA review for safety concerns.

## Some Suggest a State Tax on Cigarettes To Create Jobs

University of California at San Francisco researchers believe they've found a way to create more jobs in their state: raise the cigarette tax. According to their analysis, a tax increase of \$1 per pack would create about 12,000 jobs and generate nearly \$2 billion in new economic activity, in part by raising \$855 million a year for anti-smoking education programs, medical research, and tobacco law enforcement. The increase would also help other sectors of the economy because it would encourage more people to quit smoking, thus freeing up the money they would have spent on cigarettes to be spent on other products and services.

They believe lives would be saved, too. The state's independent Legislative Analysts' Office calculates the new tax would spare more than 100,000 people from smoking-related deaths.

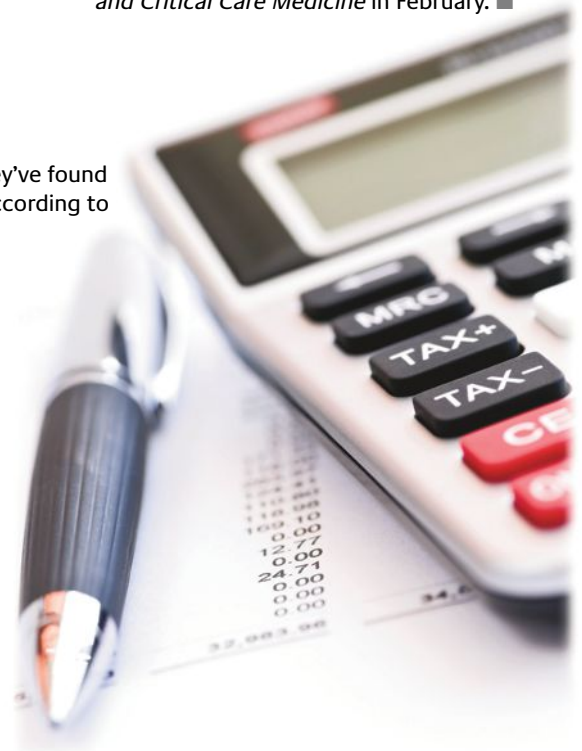
The \$1 per pack tax hike is on the June 5 ballot in California. ■

## PAP Therapy Benefits Kids, Too

While most children with obstructive sleep apnea syndrome (OSAS) are effectively treated with surgery to remove their tonsils and adenoids, obese kids and those with underlying chronic conditions or developmental delays often require additional treatment. A new study out of Children's Hospital of Philadelphia finds positive airway pressure (PAP) therapy can be a good option.

The research was conducted among 52 kids with a mean age of 12, 10 of whom had significant developmental delays. Sleepiness, behavioral problems, attention, and quality of life were assessed at baseline and after three months of PAP treatment. Significant improvements in attention deficits, daytime sleepiness, behaviors such as anxiety and shyness, and quality of life were seen with treatment, even in children who didn't fully comply with the therapy. "We found that improvements occurred even when children were only using PAP as little as three hours a night," said study author Carole L. Marcus, MD.

The study was published online ahead of print in the *American Journal of Respiratory and Critical Care Medicine* in February. ■



## Deep Brain Stimulation for Chronic Respiratory Conditions?

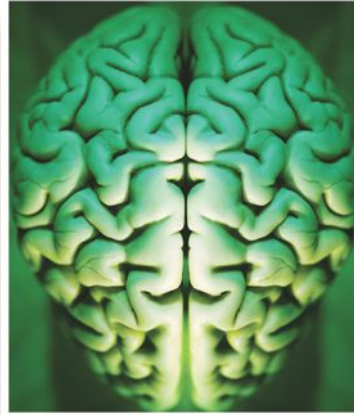
Could your asthma and COPD patients someday benefit from treatment with deep brain stimulation (DBS)? Maybe, report researchers from the University of Oxford who published their findings in the February issue of *Neurosurgery*.

Their study was conducted among patients undergoing DBS for chronic pain or movement disorders such as Parkinson's disease. In DBS, a small electrode is surgically placed in a precise location in the brain. A mild electrical current is delivered to stimulate that area of the brain, with the goal of interrupting abnormal brain activity.

The researchers wanted to assess the effect of DBS on lung function because recent studies using advanced functional imaging techniques have helped to clarify the parts of the brain governing the many and complex functions of the autonomic nervous system, including breathing.

Significant changes in some lung function parameters were seen when electrical stimulation was "on" in two

brain areas: the periaqueductal gray matter (PAG), which is stimulated in some patients with chronic pain; and the subthalamic nucleus, which is stimulated in some patients with movement disorders. For example, the peak expiratory flow rate increased by up to 14% in response to stimulation. In other brain areas, stimulation had no effect on lung function. The FEV<sub>1</sub> appeared to be unaffected by stimulation in most of the patients, who had normal lung function to begin with. But in one of the patients with chronic pain, tests performed for the study identified mild COPD. This patient had a significant increase in FEV<sub>1</sub> and other lung function measures when PAG stimulation



was "on."

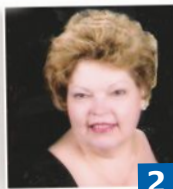
The researchers believe these preliminary findings suggest more study is warranted on the role DBS could play in treating people with chronic lung diseases. ■

## Sleep Apnea Raises Risk of Silent Strokes

Severe sleep apnea may be increasing the risk for silent stroke, say German researchers who presented a study at the International Stroke Conference convened by the American Stroke Association in February.

The investigation was conducted among 56 people with an average age of 67 who had experienced strokes. All underwent testing for sleep apnea, along with magnetic resonance imaging and computerized tomography scans to look for evidence of silent strokes.

Ninety-one percent of the participants were diagnosed with sleep apnea, and these subjects were significantly more likely to have evidence of silent strokes and white matter lesions on their brain scans. ■



## National Health Observances

- **National Asthma and Allergy Awareness Month;** May; Asthma and Allergy Foundation of America; (800) 727-8462; info@aafa.org
- **World Asthma Day;** May 1; Global Initiative for Asthma; www.ginasthma.com; materials available
- **Air Quality Awareness Week;** May 7–11; National Oceanic and Atmospheric Administration; (301) 713-1867; www.airquality.noaa.gov; materials available
- **World No Tobacco Day;** May 31; Pan American Health Organization; (202) 974-3000; www.who.int/tobacco/wntd/en

## ► Transitions

**Mitch Fischer, PhD, RRT,** has been named dean of health sciences at Southwestern Community College in Sylva, NC. Dr. Fischer previously served as coordinator of the respiratory therapy program, where he was credited with enhancing academic quality and student retention. He also served as president of the faculty senate. (Photo 1)



**Marie R. Wood** passed away earlier this year in Edgefield, SC. Wood was director of respiratory care at Edgefield County Hospital at the time of her death. (Photo 2)

We welcome news about AARC members. Submit job changes, awards, and death notices online at [www.AARC.org/transitions](http://www.AARC.org/transitions). ■

## Air Pollution Problems Continue

A new study out of the Environmental Protection Agency (EPA) shows that despite reductions in U.S. air pollution levels over the past several decades, levels of fine particulate matter (PM<sub>2.5</sub>) and ozone (O<sub>3</sub>) still pose significant risks to public health, including an increased risk of mortality.

The study combined data from the EPA's community multi-scale quality model with several years of monitoring data to create high-resolution geographic maps of air quality. EPA results showed thousands of illnesses and emergency room visits; and 130,000–340,000 premature deaths are attributable to recent levels of PM<sub>2.5</sub> and O<sub>3</sub>. Also, major metropolitan areas such as New York, Pittsburgh, Houston, and Los Angeles exhibit the largest number of estimated premature deaths due to high levels of PM<sub>2.5</sub> and O<sub>3</sub>.

The authors believe these findings could be used to inform future air quality policy decisions at the EPA. The study was published in a recent issue of *Risk Analysis*. ■



## Antibiotic Has Little Effect on Rhinosinusitis

Treating acute bacterial rhinosinusitis with an antibiotic may not be necessary, report researchers at Washington University School of Medicine publishing in the Feb. 15 edition of *JAMA*.

Their study involved 166 adults who were randomized to receive a 10-day course of either amoxicillin or placebo administered in three doses per day. The primary outcome for the study was the improvement in disease-specific quality of life as assessed with the Sinonasal Outcome Test-16. Outcomes were assessed by a telephone interview at days 3, 7, 10, and 28.

The average change in test scores was similar in both groups at day 3 and day 10, although more patients did report symptom improvement at day 7 if they had taken the active drug. However, the researchers believe these findings suggest antibiotic treatment for rhinosinusitis is generally unwarranted. They conclude, "There is now a considerable body of evidence from clinical trials conducted in the primary care setting that antibiotics provide little if any benefit for patients with clinically diagnosed acute rhinosinusitis." Yet, antibiotic treatment for upper respiratory tract infections is often both expected by patients and prescribed by physicians. ■



## School Closings Curtail Infectious Disease Transmission

Closing schools really can reduce the transmission of infectious diseases, find Canadian researchers who studied extensive data collected in the province of Alberta during the 2009 H1N1 pandemic.

Results showed transmission of the virus dropped by about 50% when kids went home for the summer. Closing schools was more significant in reducing the transmission rate than seasonal changes in weather. The study was made possible by the fact that Alberta was the only Canadian province to continue extensive virologic testing throughout the first wave of the pandemic and continuously to the middle of the second wave.

Closing schools as a preventive measure is an important consideration, according to study author David Earn, from McMaster University. "The next time a disease like SARS or the 1918 flu emerges, this paper will give policymakers more confidence that closing schools is likely to significantly reduce the rate of transmission." The Canadian Institutes of Health Research, the Natural Sciences and Engineering Research Council of Canada, the Public Health Agency of Canada, and McMaster's Michael G. DeGroot Institute for Infectious Disease Research conducted the study. ■



# Classifieds

ADVERTISING SECTION

## For Sale/For Rent

### RC Week Specials

Oakes' Books now on your hospital computers and/or your personal I-Pad, tablet, laptop, or smartphone. Free tour @ [www.RespiratoryUpdate.com](http://www.RespiratoryUpdate.com) or 8 Oakes' books for \$99. See [www.RespiratoryBooks.com](http://www.RespiratoryBooks.com) or call (207) 262-0123.

### AARC Times Classified Advertising Information & Requirements:

#### Classified Word Advertisements

AARC Members: \$50 for 50 words or less; each additional word, \$1. Free Internet placement. Non-members: \$60 for 50 words or less; each additional word, \$1.20. Listings are categorized by state. Following the state listings are United States/International, For Sale/For Rent, Miscellaneous, and Situations Wanted. All copy should be typed double-spaced. All ads will be set in 8-point type. To calculate the cost per advertisement, a "word" is considered to be one or more letters, numbers, or special characters with a space before and after.

Ads are featured on the AARC website for one month after publication. Ad may only be placed on the website with an insertion order for placement in an AARC publication. Ad is noncancelable after placement on the website. NOTE: AARC Times reserves the right to refuse any advertisement not directly relevant to res-

piratory care. AARC Times does not endorse any advertiser, its positions, practices, services, or products.

We reserve the right to make editorial changes for reasons of clarity and consistency. Every effort is taken to avoid mistakes, but AARC Times cannot be responsible for clerical or printing errors.

**Deadline for Ad Placement/Cancellation** Deadline for ad placement and written cancellations for the next available issue is April 17. Blind ads available. **For Recruitment Advertising Information, Contact Classified Advertisement** Andrea Conté • Alhambra Plaza • 725 N. Highway A1A, Suite C-106 • Jupiter, FL 33477 • (561) 745-6793 • Fax (561) 745-6795 • [AARCAD@aol.com](mailto:AARCAD@aol.com)

#### Recruitment Display Advertisements

For Recruitment Display Ad Rates, go to [www.aarc.org/marketplace/media\\_kit/recruitment\\_12.pdf](http://www.aarc.org/marketplace/media_kit/recruitment_12.pdf), or contact Tim Goldsburly and Associates, Alhambra Plaza, 725 N. Highway A1A, Suite C-106, Jupiter, FL 33477, (561) 745-6793, Fax (561) 745-6795



INSPIRING RESPIRATORY HEALTH

## CLINICAL PROJECT MANAGER (RESPIRATORY)

nSpire Health, Inc.  
Longmont, CO

nSpire Health located in Longmont, CO is seeking a Clinical Project Manager (Respiratory). The Clinical Project Manager is required to implement and manage domestic and global clinical trials, and deliver work that conforms to the Sponsor's clinical protocol, time requirements and cost constraints. Ideal candidates must be a Registered Respiratory Therapist (RRT) with proven experience in respiratory clinical trials either at a major medical institution or in a pharmaceutical/biotech company.

nSpire Health offers an excellent benefits package, including PTO, Health/Dental/Life Insurance, 401k with employer matching contributions, Section 125 Cafeteria Plan, and Health Saving Account.

Qualified candidates email resume to  
[hr@nspirehealth.com](mailto:hr@nspirehealth.com)

nSpire Health is proud to be an Equal Opportunity Employer  
EOE/M/F/D/V



Under supervision of Respiratory Care Supervisor or charge, the Respiratory Care Practitioner 2 (RCP2) performs respiratory therapy procedures per protocol and those ordered by physicians to improve cardiopulmonary conditions of patients from newborn to geriatrics. RCP2s work with patients in critical care units, adult general care, & pediatric care. Accountable for assessment and implementation of care and evaluation of Pediatric, Adolescent, Adult and Geriatric patients and families.

Experience: Min: 1-2 years Respiratory exp in acute care setting.  
License(s): Obtain State of Nevada Board of Medical Examiners Respiratory Care Practitioner license  
Certification(s): Current Registered Respiratory Therapist (RRT) credential from National Board of Respiratory Care (NBRC) req'd. Current AHA BLS certification req'd. ACLS, PALS, NRP req'd.

Apply directly to our website for immediate consideration:

<http://careers.renown.org/jobs/respiratory-care-practitioner-2-2911732> or  
[www.renown.org](http://www.renown.org)



**IVY TECH COMMUNITY COLLEGE  
TERRE HAUTE, INDIANA  
DIRECTOR OF CLINICAL EDUCATION -  
RESPIRATORY CARE PROGRAM  
AVAILABLE SUMMER SESSION – MAY 15, 2012**

The College is seeking an individual who wants to be part of a dynamic, forward-thinking, progressive team. Specific responsibilities include: instruction of assigned courses; development of course materials; student recruiting, advising, and counseling; inventory control within the instructional area; working with the Advisory Committee and area high school teachers; maintenance of students' academic records; providing assistance in scheduling of classes; helping with curriculum revisions; and other duties as assigned.

The **Director of Clinical Education** must have a minimum of four (4) year's experience as a Registered Respiratory Therapist; of which at least two (2) years must include experience in clinical respiratory care. The Director of Clinical Education must have a minimum of two (2) years' experience teaching in an accredited respiratory care program either as an appointed faculty member or as a clinical preceptor.

A qualified faculty member in respiratory care is one who has an earned baccalaureate or higher degree, from a regionally accredited institution, with academic preparation appropriate to the course(s) being taught; is a Registered Respiratory Therapist, licensed in Indiana.

Qualified applicants should apply online [jobs.ivytech.edu](http://jobs.ivytech.edu).

Ivy Tech Community College is an Accredited,  
Equal Opportunity/Affirmative Action Employer

**Saint Louis  
University Hospital**

**Director of Respiratory Services**

The Director of Respiratory Services at Saint Louis University Hospital will direct and oversee the activities of Respiratory Care Plan, develop and be accountable of all aspects of care and services provided by the Respiratory Therapy Department.

**Desired Skills & Experience**

- Bachelors Degree in Management or Science preferred
- Must be a Registered Respiratory Therapist licensed in the state or Missouri
- At least 5 years in Management, preferably at the Director Level. A manager in an academic setting will be considered.
- Demonstrated successes in quality and practice changes, and is able to improve the competency and educational level of staff
- Exceptional communication and interpersonal skills
- Understanding of critical care and trauma respiratory care needs
- Ability to work with both attending physicians and residents, able to apply conflict management and problem solving

**CONTACT INFORMATION**

Cindy Polanco  
Recruiter  
Phone: 314-577-8268  
Fax: 314-577-8574  
E-mail: [cindy.polanco@tenethealth.com](mailto:cindy.polanco@tenethealth.com)  
Website: [sluhospital.com](http://sluhospital.com)  
Address: 3635 Vista Ave.  
St. Louis, MO 63110



**NEW ORLEANS**

Join us for the 58th International Respiratory Convention & Exhibition

[www.aarc.org/education/meetings/congress/](http://www.aarc.org/education/meetings/congress/)



**Save the Dates**

**November 10-13, 2012**

**New Orleans, LA**

**(Saturday through Tuesday)**





# Calendar of Events

## AARC & State Society Programs

### April 30 – May 2

Rochester, MN

Minnesota & Wisconsin Societies for Respiratory Care  
8th Annual North Regional RC Conference  
Contact msrcnet.com or wsrconline.org

### May 16–17

Bangor, ME

Maine Society for Respiratory Care’s “Maine Event”  
Contact Laura King, (207) 872-1281  
or lauraking@mainegeneral.org

### May 21–23

Virginia Beach, VA

Virginia Society for Respiratory Care’s  
35th Conference and Exposition  
Contact Pamela Niblett at (757) 312-3054  
or Ann Beverly at (757) 312-5256

### May 23–25

Austin, TX

Texas Society for Respiratory Care’s 41<sup>st</sup> Annual  
Convention and Exhibition  
Contact TSRC at (972) 495-9200 or www.tsrc.org

### May 30 – June 1

Oak Brook Terrace, IL

Illinois Society for Respiratory Care’s  
44th Conference and Exposition  
Contact www.isrc.org or Kelli DeBerry at deberryk@Alexian.net  
or (847) 981-3581

### July 12–15

Santa Fe, NM

AARC Summer Forum, Building a Simulation Toolbox  
(pre-course), Getting the Best ROI: Maximizing Patient  
Education (post-course)  
Contact AARC, (972) 243-2272,  
www.aarc.org/education/meetings

### October 21–27

Respiratory Care Week

Contact AARC, (972) 243-2272, www.aarc.org

### October 24

Lung Health Day

Contact AARC, (972) 243-2272, www.aarc.org

### November 9–13

New Orleans, LA

AARC Congress 2012, Mechanical Ventilation 2012 (pre-  
course), Patient Safety Starts with You! (pre-course)  
Contact AARC, (972) 243-2272,  
www.aarc.org/education/meetings

Submissions for the next available issue are due May 17.

For information on submitting calendar events, contact: Beth Binkley, AARC  
Times, 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706 (972)  
243-2272 Fax (972) 484-2720 Email binkley@aarc.org



# Advertiser Index

Company Name .....	Pg #
<b>Breathe Technologies, Inc</b> (877) 698-1325 www.BreatheNIOV.com	5
<b>Dräger Medical</b> (800) 437-2437 www.draeger.com/respiratorycare	17
<b>Ivy Tech Community College</b> jobs.ivytech.edu	83
<b>Maquet</b> www.maquetusa.com	C2
<b>Masimo</b> (800) 257-3810 www.masimo.com	C4
<b>Nonin Medical, Inc</b> (800) 541-2071 www.onyxvantage.com	11
<b>Northeastern University</b> (877) 668-7727 www.northeastern.edu/cps/respiratory	9
<b>nSpire Health</b> hr@nspirehealth.com	82
<b>Oridion</b> www.oridion.com	3
<b>Philips Respironics</b> www.philips.com/NM3	21
<b>Renown Health</b> www.renown.org	82
<b>Saint Louis University Hospital</b> (314) 577-8268 (314) 577-8574 Fax www.sluhospital.com	83
<b>Teleflex</b> (866) 246-6990 www.gibeck-humidflo.com	C3

To advertise, contact: Tim Goldsbury, Advertising Sales,  
Alhambra Plaza, 725 N. Highway A1A, Suite C -106, Jupiter,  
FL 33477, (561) 745-6793,  
Fax (561) 745-6795, goldsbury@aarc.org. Or contact Beth  
Binkley, Advertising Assistant, Daedalus Enterprises, Inc.,  
9425 N. MacArthur Blvd.,  
Suite 100, Irving, TX 75063-4706, (972) 243-2272, Fax  
(972) 484-2720, binkley@aarc.org



# THE 72-HOUR SHIFT

3 days of uninterrupted mechanical ventilation

Studies have shown that minimizing circuit breaks reduces VAP.<sup>1,2</sup> This integrated kit reduces the frequency of ventilator circuit breaks so all components, including the HME, can remain in-line during the first 3 days of mechanical ventilation, maintaining PEEP and maximizing patient outcomes.



Time to protect

72  
HOUR

**GIBECK® Humid-Flo®**  
INTEGRATED KIT

[gibeck-humidflo.com](http://gibeck-humidflo.com) | 866-246-6990

References: 1. Han J, Liu Y. Effect of ventilator circuit changes on ventilator-associated pneumonia: a systematic review and meta-analysis. *Respiratory Care*. 2010;55:467-474. 2. Coffin S MD, MPH, Klompas M MD, Classen D MD, et al. Strategies to Prevent Ventilator-Associated Pneumonia in Acute Care Hospitals. *Infect Control Hosp Epidemiol*. 2008;29:S31-S40.

Gibeck, Humid-Flo and Teleflex are registered trademarks of Teleflex Incorporated or its affiliates.  
©2011 Teleflex Incorporated. All rights reserved. Lit. No. 2011-0462 v1.

**Teleflex®**

# Acoustic Respiration Rate

Accurate > Easy to Use > Patient-Tolerant



## Introducing rainbow Acoustic Monitoring™

Masimo rainbow® Acoustic Monitoring noninvasively and continuously measures respiration rate (RRa™) using an adhesive acoustic sensor. After the sensor is easily and comfortably applied to the patient's neck, RRa helps clinicians continually assess the patient's respiratory rate.



rainbow Acoustic Sensor™

[www.masimo.com](http://www.masimo.com)

1-800-257-3810

© 2011 Masimo Corporation. All rights reserved.

