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Times

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The American Association for Respiratory Care has a Strategic Plan that includes its Mission and Vision Statements for 2015–2020.

Bookmark this page:
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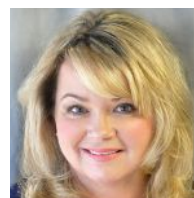
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2017 Looks To Be an Eventful Year

by Thomas J. Kallstrom, MBA, RRT, FAARC

It seems like it was just yesterday that the presidential elections ushered in a new president-elect. This of course comes with uncertainty for the future, a phenomenon that we, as Americans, are privileged to experience every four years when we elect or re-elect a president.

2017 should be an interesting year for the profession as we move into uncharted territory. Looking forward, you can be sure that the AARC will continue to fight on Capitol Hill for our profession and our patients. One endeavor that has been on our radar screen over this last congressional session is telemedicine. Make no mistake about it, this will be a significant part of the health care continuum in the years to come. As of late November, the Telehealth Parity Act of 2015 (HR 2948) has not been moved into law, and in this lame-duck congress we are unlikely to see it come to fruition in 2016. We are prepared to engage our lobbyists with some of our visionary elected leaders in Washington to introduce a bill in 2017 that again calls out respiratory therapists as one of the professionals who should be able to provide education, assessment, counseling, etc., using telemedicine. You will hear more about this in the coming months. Our Political Advocacy Contact Team (PACT) will be on Capitol Hill in large numbers in the spring on our Hill Day, working to draw attention to this bill.

Looking back, two monumental events occurred on April 15, 1947. They were entirely different in their scope and influence, yet both made an impact that we still feel today. The first event occurred, of all places, at Ebbets Field in Brooklyn, NY. It was on this day that Jackie Robinson made history by being the first African

American to play in a major league baseball game. By breaking the color barrier in sports, the tone had been set in the American civil rights movement. This event has held significant meaning for the rest of the 20th century and into the 21st. It took a lot of courage on

Robinson's part to do this, and in doing so he let the world know that segregation in sports was wrong. This ultimately changed sports and the way Americans looked at segregation.

On the same day in Chicago, the Inhalation Therapy Association (ITA), which today is the American Association for Respiratory Care, was formally chartered as a not-for-profit entity in the state of Illinois. A diverse group of "oxygen orderlies," physicians, and nurses had met the year before at the University of Illinois to form the ITA. We should note that in 1947, when the ITA was formally chartered, the profession had only 59 members. This of course

pales in comparison to the nearly 50,000 domestic and international members of the AARC today.

In the past 70 years, the AARC has been front and center in guiding the direction of the profession. The role of the respiratory therapist has changed dramatically since the early days of pushing oxygen tanks. Seventy years later, we continue to see the roles of the respiratory therapist evolve into meaningful and life-saving roles. According to our most recent Human Resource Survey, 75% of practicing RTs still practice in the acute care facility. For some time, we have seen a necessary expansion beyond the walls of the hospital. There are many opportunities in this expansion, of which telemedicine is one.

about the author...



Thomas J. Kallstrom, MBA, RRT, FAARC, is executive director of the AARC.

In recognition of this memorable year, the AARC will be featuring news and stories about what the respiratory care community is doing to commemorate our 70th birthday. One event will occur in April at the Dittrick Museum on the Case Western Reserve University campus in Cleveland, OH. A medical museum that features a wide variety of rare books, artifacts, medical equipment, and images pertaining to the history of medicine, the Dittrick Museum will host an event that will display the history of the profession of respiratory care over the past 70 years.

We expect other events to occur locally throughout the nation. If you are involved in or know of other events, please contact the AARC so that we can let our members know of your commemoration.

Seventy years is a long time, both in sports and in respiratory care, and during this time we have seen positive advancements stemming from two unconnected events that happened on April 15, 1947. ■

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Caring for the Cystic Fibrosis Patient as Father and Respiratory Therapist

by Mark W. Mangus, Sr., BSRC, RRT, RPFT, FAARC

I had been in respiratory care for over ten years when my daughter Kimberly was born. What was at that time a blissful — though hectic — existence soon changed when, before Kim was even five months old, our world was turned on its head with her diagnosis of cystic fibrosis (CF). Early on, we noticed her voracious appetite and poor weight gain, and we began to monitor her caloric intake to get a handle on her nutrition and to see whether our observations and increasing suspicions were accurate. We soon were supplementing her breast milk diet with infant formula and baby food. It was then that we saw how many actual calories she was taking in. We also observed significant changes in her digestion, especially her stools, which became bulky and foul-smelling. The south Texas summer was upon us and we began to see salt from her sweat crystalizing at her hairline.

Employed at the local children's hospital, I had been caring for CF kids for two years. I knew well the signs and symptoms of the disease and feared the worst. At 4.5 months, we took Kim to her 6-month pediatrician appointment. We let the doctor check Kim out before we shared our observations and concerns. Having examined Kim, the doctor happily informed us that while Kim was small — in the bottom 15-percentile on the growth chart — she looked happy and healthy. When she asked why we had come 6 weeks early, we reported her caloric intake, the stool changes, and her salty sweat, expressing our fear that she had CF. The doctor dismissed the possibility until I pointed out the line of crystalized salt on Kim's forehead. She responded: "Any time a parent tells me their child 'tastes' salty, I order a sweat chloride test to rule out CF." The first test came back at 75 mmol/L. A repeat test measured 95 mmol/L, pretty much locking up the diagnosis.

Referred to our CF center, we began our odyssey that now spans almost 35 years. Pancreatic enzymes were prescribed, and we were instructed to feed Kim a "normal" diet and do our best to facilitate her opportunity to live as "normal" a lifestyle as possible. We were also told not to go looking up a lot of "medical" information on CF, as we would only be frightened and might over-react to what the literature had to say. Of course, we immediately went to the medical library and voraciously consumed everything we could get our hands on, which, when combined with my experience with CF as a respiratory therapist, amplified our growing concerns as predicted.

In 1982, the mean age of survival for children born with CF was about 11 years, a most disheartening statistic. In my experience working with CF kids, I had already seen several succumb before age 11 and many in their teens doing very poorly and dying. CF patients came into our hospital on a regular cycle several times per year, "clean-outs" being the stop-gap response to the interim laxity in maintenance care that should have been a routine part of CF'ers home life. Realizing that, as hard as we

RTs worked with our CF patients during their inpatient clean-outs, we still could not give them the optimal care possible with our inpatient efforts, my wife and I made a pact with our CF doctor that Kim would be treated at home, including any clean-outs she might need along the way as long as she did not require care beyond our capabilities.

I built a tilt-table and began doing postural drainage and percussion two to three times daily, teaching Kim to cough on demand by her toddler years. We soon added aerosol therapy with bronchodilators and Mucomyst, even though at that time aerosol therapy was not con-

about the author...



Mark W. Mangus, Sr., BSRC, RRT, RPFT, FAARC, is a pulmonary disease management & rehabilitation consultant in San Antonio, TX. He presented a lecture on this topic at AARC Congress 2016.

sidered the standard of care until a child was old enough to effectively inhale the medication.

With diligent care, Kim thrived and led a very active lifestyle, despite having the most severe phenotype of CF (her genotype turned out to be “double delta F 508”). The father in me was fervent in pushing Kim to be adherent with her self-care, which she took responsibility for in her pre- and early teen years. Sure, she had her moments of rebellion, but, realizing that she felt so much better and, more importantly, was able to do the things that gave her life quality and normalcy, she was committed to maintaining her care at the highest level to reduce those complications she had control over. This has carried on throughout her transplanted life of over 13 years.

My role in her life has encompassed two perspectives — as father and as RT. First, the RT in me had to bring home the knowledge and skills of my work to give Kim the best opportunity to stay as healthy as possible in the face of the many complications she has encountered. Airway clearance therapies were one aspect of her total care. When Kim began needing intravenous antibiotic therapies, my wife (an RN) and I managed her peripheral, then her peripherally inserted central catheter lines, and on to the two port-a-caths she required, along with multiple episodes of antibiotic administration.

My experience and contacts in home care afforded me the opportunity to apply several interventions and obtain equipment and therapeutic devices as we went along. When intrapulmonary percussive ventilators (IPVs) were introduced in our area (1994), and having studied up on and been unimpressed with then-popular vest therapy, I got her started on IPV, the first patient in our area to use it. She used Pulmozyme and TOBI by HHN as soon as they came out. Though the effectiveness of aerosolized Mucomyst came into question during the time Kim used it, we continued it because her mucus management became a nightmare when she was off of it, especially when she had bouts of hemoptysis and had to periodically stop the Pulmozyme.

When her pulmonary function declined, I was able to easily acquire and effectively apply home oxygen therapy. When she embarked on

her transplant journey and needed pulmonary rehab, she came to my clinic and pulmonary rehab program. When she needed supplemental nutrition to go from 67 pounds to 95 pounds at transplant, my wife and I were able to quickly get her gastrostomy placed and manage it, and help Kim manage it herself. When Kim blew a pneumothorax and ended up in intensive care in acute respiratory failure, after a failed pleurodesis, I intervened to help manage her pulmonary care. With a CO₂ for 5 days at 95 mm Hg, her pulmonary physician insisted on reducing her oxygen and placing her on mechanical ventilation. I stood in the way of both, knowing that her PA pressures climbed above 50 mm Hg when her saturation was < 94%. With her pH steady between 7.43 and 7.47, I prevailed upon her doctor to avoid the dangers of mechanical ventilation and pushing her pH way above 7.5 simply to drop her CO₂. Ultimately, Kim avoided the need for the typical hospitalizations for clean-outs.

As a father, I have supported her effort and drive not only to live a reasonably normal life, but also to accomplish her many achievements, goals, and milestones along the way. Kim has done incredible things with her life so far, and she is not slowing down. She received her BSRC degree in 2010 and works with her preferred pediatric patients, and she has traveled the world. On leap day in 2016, Kim fulfilled yet another dream when she married the love of her life — also an RT. While we all understand that her longevity is tenuous, it is admirable that she continues to live life to its fullest, rather than living simply to avoid death. Needless to say, she is my hero and I couldn't be prouder to be her father. ■



Physical Therapy Mobility Protocols Can Decrease Hospital LOS for Mechanically Ventilated Patients

by Kenneth J. Miller, MEd, MSRT, RRT-ACCS, NPS, AE-C, FAARC

More than four million patients are admitted to intensive care units (ICUs) in the United States each year, with 80–90% of these patients surviving their ICU stay.¹ Disabling weakness and associated impairments in physical function in ICU survivors also occur commonly. The frequency of these impairments is approximately 25–60% in ICU patients with sepsis, multiple organ failure, or prolonged mechanical ventilation.² Critically ill patients have limited activity due to their diagnosis, equipment, and condition. As a result of this limited activity, they can suffer from deconditioning, muscle weakness, and infections. Physical deconditioning during an intensive care stay can occur after a few days. This fact has received considerable attention in clinical and scientific literature over the past several years. A wide range of published reports has attempted to study the effects of mobilization and physical therapy on multiple factors, including patient safety, ambulation capacity, muscle strength, functional outcomes such as activities of daily living, duration of mechanical ventilation, ICU length of stay, hospital length of stay (LOS),⁵ and mortality.³

Historically, early mobilization in the ICU was common practice. However, secondary to the advent of invasive monitoring devices, fear of accidental airway dislodgement, and scarce resources, this practice was curtailed.⁴ Recently published articles indicate that reviving principles of early mobility within the ICU may decrease both ICU duration and hospital length of stay

Benefits of early rehabilitation

1. Muscle strength, functional mobility, and quality of life

Early rehabilitation in the ICU is associated with improved muscle strength, physical function, and quality of life. A randomized controlled trial found that, compared

to usual care, early physical and occupational therapies were associated with a greater likelihood of achieving independent functional status, less ICU-acquired weakness, and a greater unassisted walking distance at hospital discharge.⁶ A prospective quality improvement project, including implementation of a multidisciplinary team to improve sedation and rehabilitation strategies in several institutions, has resulted in improved functional mobility in patients undergoing rehabilitation. In another randomized controlled trial, ICU-based rehabilitation via cycle ergometry was associated with improved physical function and quality of life.⁷

2. LOS, duration of mechanical ventilation, and cost savings

Early rehabilitation may be associated with cost reduction through decreased ICU or hospital LOS, hospital readmissions, and duration of mechanical ventilation.⁸ The previously mentioned quality improvement project found an association between early rehabilitation and a decrease in ICU and hospital LOS.⁹ Early physical and occupational therapy was also associated with a decrease in ICU LOS and mechanical ventilation in a randomized controlled

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trial.¹⁰ A randomized controlled trial of 330 acute respiratory failure patients demonstrated an association between protocol-driven rehabilitation and a decrease in adjusted ICU and hospital LOS.¹¹ A subsequent analysis of survivors at one year revealed patients in the usual care group had higher odds of readmission or death than the early mobility group.

In that randomized controlled trial, the average cost per patient in the mobility group was \$41,142 compared with \$44,302 in the usual care group.¹² The mobility group also had lower absolute costs (\$6.8 million vs. \$7.3 million). Finally, a financial model based on data from the early rehabilitation program in the Johns Hopkins Medical Intensive Care Unit and from existing publications predicted net financial savings in 83% of possible scenarios when initiating a rehabilitation program.¹³ Overall, estimates ranged from \$88,000 (net cost) to \$3.8 million (net savings).

Risks of early rehab

Mobilizing patients in the intensive care environment is not without risk. Catheters and supportive equipment attached to patients can become dislodged and cause injury. Insertion and reinsertion of catheters can increase infection risk and cause unwanted stress and pain for patients and families already stressed by the medical acuity of the ICU. Critically ill patients with physiological derangements can have adverse hemodynamic responses to activity. Patients with limited aerobic capacity may respond to exertional stress with exaggerated heart rate and blood pressure responses or conversely may not have enough physiologic reserve to meet even the seemingly simple task of sitting on the edge of the bed. Complication rates from adverse events such as accidental extubation, hemodynamic stress, and respiratory decompensation are reported to be less than 5%.¹⁴ To minimize the chance of an adverse event, the importance of premobilization assessment and a systematic approach to the mobility process are vital.

Any mobilization program requires a multidisciplinary approach to have optimal results. Prior to any mobilization sequence, the goals and barriers of the mobilization must be discussed by providers, bedside RNs, respiratory therapists, and physical therapists.

Role of the respiratory therapist

Assessment of clinical stability of respiratory function is critical to the success of early mobilization. Does the patient meet the criteria for mobilization? Assessment of the patient's gas exchange, work of breathing, and airway stability are general assessments that are performed prior to early mobilization. The RT is responsible for maintaining ventilation and airway stabilization during the mobilization. Most often a small transport ventilator is utilized, and the RT monitors the work of breathing, SpO₂, and EtCO₂ during the mobilization time frame. The RT may have to

increase ventilator support (e.g., increase pressure support level) during ambulation to address the increased work of breathing and oxygen consumption associated with increased workload. If there is evidence of impaired gas exchange, hemodynamic stress, or excessive work of breathing during the mobilization, the session is terminated and the patient placed back on rest ventilator parameters.

Role of physical therapist

Physical therapists are trained to identify somatic disorders and implement a plan of care that progresses a patient from debilitation to independence. The assessment of muscle strength, endurance, and coordination are vital assessments that the PT performs prior, during, and post ambulation. The PT will assess patient muscle activity and gait during ambulation and develop a plan of care. The PT often designs ambulation goals and levels of activity care plans.

Protocol criteria for mobilization

The purpose of a protocolized approach to mobilization is to facilitate a safe and comparable level of care for critical patients receiving mechanical ventilation before, during, and after mobilization. The goals of mobilization of mechanically ventilated patients include improving respiratory function by optimizing ventilation/perfusion matching, increasing lung volumes, improving adverse effects of mobility, increasing functional independence, improving cardiovascular fitness, and increasing psychological well-being. A multidisciplinary approach is utilized to assure that all necessary resources are present during mobilization. Below is an example of what our medical/surgical ICU mobilization protocol includes.

Inclusion criteria required prior to mobilization of a mechanically ventilated patient unless otherwise approved by attending provider include:

- a. Ventilatory modes:
 - i. CMV
 - ii. ASV
 - iii. PSV
- b. FiO₂ < 60%
- c. PEEP < 10 cm H₂O
- d. Oxygen saturation >90%
- e. Respiratory rate <35 breaths per minute

Termination criteria: Ambulation will be terminated and patient returned to bed if any of the following conditions develop:

- a. Oxygen saturation <88% on mechanical ventilation mode during activity, unless otherwise specified by a medical practitioner.
- b. Respiratory rate >35 breaths per minute
- c. Change in blood pressure +20 mm Hg from baseline

- d. Hypotension associated with dizziness, fainting, or diaphoresis
- e. Change in heart rate +20% from baseline
- f. Change in heart rhythm
- g. Change in breathing pattern with an increase in accessory muscle use or nasal flaring.
- h. Otherwise per specific order.

A multidisciplinary approach along with a well-designed mobilization protocol can help decrease ventilator and ICU LOS, facilitate muscle conditioning, and improve quality of life. Patient selection, good clinical assessment, and well-defined clinical goals will optimize the process. ■

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Without My Stethoscope, Am I Still a Respiratory Therapist?

By Jamie Dawsey, RRT, AE-C, CTTS

“**J**amie, I did it! I did that puckered lip breathing thingy you told me to do.” With that raspy voice, the way she said my name, and that coughing at the end, I knew exactly who it was. The excitement was definitely new, though. I had been talking to her every few weeks for months. She picked up every time I called and told me that I couldn’t help her, that she had tried everything.

I was still fairly new at the time and could not for the life of me figure out what to do. We talked about her symptoms, and I asked if she wanted to discuss breathing techniques and medication regimen. She always said, “Go ahead, but it won’t help.” Every few weeks, we had the same conversation.

I responded to her excitement, with a slight surprise in my voice, “Oh, wow! That’s great! Can we go ahead and get your privacy information first, and then we can talk about your health?” She was so excited she was tripping over her words to get them out quickly. “Jamie, I was washing dishes, and all of a sudden I couldn’t breathe. I took some pumps from my inhaler, and I still couldn’t catch my breath. The phone was in the other room and was far away. Then for some reason, I remembered you talking about puckering my lips and whistling. I started doing that and I got to my phone. The ambulance came and got me, and they gave me a bunch of breathing treatments.” As I listened to her enthusiasm, I couldn’t help but smile. I was just as amazed as she was.

This was my “a-ha” moment — when I realized what it meant to be a health coach and that I loved it.

When I came in to interview for the position as a respiratory therapist health coach, I was uncertain about what this job would be. How could I be a respiratory therapist without a stethoscope, without my handy pulse oximeter, and, most importantly, without a physical pa-

tient in front of me? During the interview, we discussed educating patients over the phone and supporting them on the road to staying healthier. We talked about the details of being a health coach and the process, but still, in my mind, I was asking, “How am I considered a ‘real’ respiratory therapist?” Trust me, I was not the only one to question me about this. All my friends, family,

and co-workers asked me the same thing, “You went to school and now you’re not working with patients anymore?” But I was ready for a change and wanted to see what else was out there for a respiratory therapist, so I accepted the offer when it came.

I understood the benefits of health coaching over the phone. I understood why a health coach was important and what my role was in the patient’s life, yet I still wondered if I had made the right decision getting away from hands-on patient care. No more running to codes, no more sticking the patient for an arterial blood gas, no more listening to breath sounds — what was a respiratory therapist supposed to do? I felt that I had lost a part of what made me a therapist ... until this moment. Then it all clicked.

I finally figured out why I felt lost. In a clinical setting, no matter if it’s a huge hospital or a nursing home, there is a patient, a physical patient that you can assess, ask questions, interpret facial expressions, see breathing patterns, etc. You are able to provide treatments, utilize nebulizers and spacers, and obtain medications to assist the patient with breathing exercises. You are able to deliver to the patient, right then and there, treatments that they require. There is an immediate sense of accomplishment. We see someone having a hard time breathing and wheezing, and we give them some breathing treatments. BAM! The patient

about the author...



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is breathing better — all in the span of less than 20 minutes. How could you not like this scenario, right?

Now I have been introduced to a whole new world. I have come to realize that, as a respiratory therapist, I am no longer restricted to a clinical facility or conducting home visits. I have finally grasped the importance of what RTs do as health coaches and the huge impact we make in our patients' lives.

RTs are here for the long run. You may scoff at my newfound awareness, but ask yourself a few questions. What happens when your patient gets discharged? Will she follow up with her doctor? Does the patient know how to correctly take his medication or use his inhaler without you being there? Yes, you can say that the patient received discharge instructions. Yes, the patient will receive follow-up by the case manager or the doctor's office. Yes, you went over how to use the inhaler. But let's be frank — there is a lot going on while the patient is in the hospital, and she may or may not remember everything when she leaves. This is where a health coach shines.

Being a health coach takes patience and understanding. You may not see the results of your efforts immediately, or at all. You have to be resilient in the face of roadblocks.

As an RT health coach, the ultimate goal is to help patients improve their quality of life. The key word here is "their." For us to help anyone, we must see things from the patient's point of view. How can we help if we have no idea what the patient's life is like? For example, we tell our patients that it is very important for them to take their steroid inhalers every day to keep their asthma under control. Did we ever stop to think that the patient may not be able to afford the inhaler? What if their insurance does not cover this particular medication? Can we, as health care providers, honestly say that we know everything about our own health insurance? I can list all the barriers a patient could possibly have, such as transportation and lack of equipment, but that would take all day.

I have found that coaching is not just telling the patient what to do and expecting him to do it. There is so much more than that. It is about finding out what the patient defines as "being healthier," what motivates him to want that change, and then helping figure out what to do to get there. One may think this is just a quick question and answer session, but to truly have a patient change current health behaviors is a process. This position has taught me to treat the patient as a whole individual and not as an "asthmatic patient" or a "COPD patient." I have learned that, to help my patients, I must get to know

them. I need to explore their lifestyle and how it affects their health. I must become familiar with their resources and barriers before giving them advice on what to do. I have to ask the right questions at the right time.

The process takes a little finesse and practice. Think about when you first learned how to drive. You knew where the brake and gas pedals were, but remember how many sudden stops and slow starts there were? It took practice for your driving to be as smooth as it is today. Developing your own style of coaching will take practice.

One of the biggest influences in my coaching style has been the word "change." I had to change my tactics when talking to a patient. I had to realize that change comes from within and you can't make someone change. I have learned to really listen to my patients, not just to what they are saying but to what they are trying to convey. I find that if I listen carefully and ask the right questions, I can pinpoint what their real needs and barriers are. I can determine the driving force behind their desire to change. Conversations with my patients have transformed from, "You need breathing treatments" to "How are the breathing treatments helping you?" These questions are much more tailored to their needs at the time. Having the patient state out loud the pros of their actions will help them recognize the benefits of continuing that behavior.

So, to answer the question, "Am I still a real respiratory therapist?" Yes! I am still a respiratory therapist and more. Health coaching has been a rewarding and humbling experience for me. I have gotten to know people from every walk of life, roads that I have never been down and may never be able to fully comprehend. I get to accompany patients on their journey toward their health goals. Years later, I am still awed by how a simple question like "What do you think would work for you?" could have such a huge impact. ■

Zombie Alert

by Anthony L. DeWitt, JD, RRT, FAARC

The zombies are coming!

No, this is not the kind from the AMC show *The Walking Dead*, but a different kind: zombie debt collectors. It is an industry built on lies and half truths, and it depends on inaction for success. But knowing that the zombies are out there will give you the ammunition you need to fight them.

Zombies, according to popular fiction, being already dead, can't be killed. That's why lawyers use the term "zombie debt" to refer to debts that, although unenforceable due to the statute of limitations, come back to life through unique features of American law. Because therapists are among the millions affected by the recent economic downturn, this column may be one you want to pin up next to the telephone. The money you save may be your own.

Whether you have an American Express card or some other credit card, the relationship between you and the credit card company is one of contract. American Express agrees to pay the merchant, and you agree to pay the card company. Many people, however, do not use credit cards for convenience; they use them for the purpose of short-term loans. These short-term loans sometimes carry an interest rate of 15% or more while the card is active, and in the event of default, that rate climbs to as much as 25%. Of course, no one ever assumes they're going to default when they apply for a card, but jobs are lost, people get sick, and economic downturns happen.

When there is a default, the bank has a choice. If the balance is significant and the debtor has assets (a house, car, etc.), they can sue to collect. If the balance is smaller, they may hire a collection agency. If the collection agency is not successful, the bank will sell the debt. An assign-

ment is a legal contract where the person who is owed money (the bank) assigns its right to payment to a third party. Often these debts are sold for a fraction of their worth. For example, a \$1,000 debt might be sold for \$100 or less. These third parties, sometimes called the Zombie Debt Collectors, then go to work.

Sometimes creditors sue immediately, using the default provisions to turn a \$1,000 debt into a nearly \$2,000 debt with interest and attorney's fees. See Table 1.

Some of the less reputable creditors wait two or three years to bring a lawsuit, but use the default provision to inflict the maximum interest rate in the interim. After five years, a \$1,000 debt becomes a \$3,445.80 debt. Although some try to work out a payment plan, most simply file a lawsuit.

Amazingly, in most cases people do not even show up to fight the lawsuit. This is a bad idea. When lawyers enter an appearance and demand discovery, the Zombie Collectors often dismiss the lawsuit and go away. They do not want to explain that they paid \$100 for this debt and are now trying to collect \$3,000 and fees. It is much easier to pick on unrepresented citizens than those with lawyers.

When people do not show up, the creditor gets a "default" judgment and can garnish wages, attach bank accounts, and even seize vehicles and other personal property to satisfy the debt. Often the only alternative for someone in this situation is to seek bankruptcy protection.

Sometimes debts are sold, again for pennies on the dollar, to a second or even a third company. These debts are often more than five years old. These companies often use hardball tactics to try and collect the debt over

about the author...



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Table 1: Value of a \$1,000 credit card debt over 6 years at different interest rates. After 12 months, a \$1,000 debt is worth \$1,280 at 25% interest.

	2010	2011	2012	2013	2014	2015	2016
10%	\$1,000.00	\$1,104.71	\$1,220.39	\$1,348.18	\$1,489.35	\$1,645.31	\$1,817.59
15%	\$1,000.00	\$1,160.75	\$1,347.35	\$1,563.94	\$1,815.35	\$2,107.18	\$2,445.92
20%	\$1,000.00	\$1,219.39	\$1,486.91	\$1,813.13	\$2,210.92	\$2,695.97	\$3,287.44
25%	\$1,000.00	\$1,280.73	\$1,640.27	\$2,100.75	\$2,690.50	\$3,445.80	\$4,413.15

the phone because they know their chances on these older debts in court is poor.

The age of the debt is important because, while the interest on the credit card debt continues to accrue, the right to sue a debtor on that debt starts running from the date of the last payment. So while some states like Rhode Island and Iowa have a statute of limitations of ten years, many states like Alabama have a three-year statute. The average statute of limitations is five years (e.g., <https://www.nerdwallet.com/blog/credit-card-data/credit-card-debt-statute-limitations-guide-50-states/>). This means that a creditor who tries to take you to court after the statute of limitations usually cannot get a judgment if they truthfully disclose the date of the last payment. Creditors' attorneys are often a sneaky lot, however, and they have lots of tricks up their sleeves.

First, the creditor's attorney never puts a date anywhere in the lawsuit, so a court cannot tell from the face of the petition or complaint that the debt is time barred. Second, unless the debtor shows up to contest it, the court grants a default judgment and even though the debt would have been unenforceable if contested, it now is enforceable for another ten years or more as a judgment.

Another sneaky trick that creditors use is to call and suggest to a debtor that they would accept even a small payment as a "show of good faith." They might even falsely suggest they are not interested in collecting the entire debt. Again, after the statute of limitations date, there is no legal obligation to pay anything, but the creditors often speak in terms of "don't you want to do the right thing?" They'll say "just send us a check for \$10." Remember when the statute of limitations begins to run? A person who sends in even a small payment, even as little as \$10, has recognized the debt and reactivated the statute of limitations, and now the creditor can sue for the full amount. Ouch!

Using these tricks to get around the statute of limitations, the Zombie Debt Collectors resuscitate debt that has long been dead. Some of the worst of the worst even call and threaten to have people arrested for not paying their bills. News flash: You cannot be arrested for not paying a credit card debt. Many of these tactics are prohibited under the Fair Debt Collection Practices Act.

This leads to DeWitt's Rules for Dealing with Collectors:

1. Pay your debts on time.
2. Don't overextend yourself. Your credit card debt should never be more than two months of your pay.
3. If you get behind, get in touch with the bank and work out a plan.
4. Learn your rights under the Fair Debt Collection Practices Act (www.ftc.gov) and any state laws regulating debt collectors.
5. If collectors call you, dispute the debt. Don't let them threaten or abuse you. Hang up!
6. Record the collector's calls. If you are threatened physically or with assault or arrest, file a complaint with the Federal Trade Commission and your Attorney General.
7. Never agree to pay anything; the debt they say you owe may be barred by the statute of limitations. Consult with a lawyer before paying anything.
8. If you are sued, consult with a lawyer. If you cannot afford a lawyer, many state bar associations or legal aid societies may be willing to help.
9. Learn your state's statute of limitations, and even if you can't afford a lawyer, show up and contest the debt in court. Ask the court to appoint a lawyer, or give you time to find one. Most courts will do this.

If you are behind in your obligations, do not let the weight of this lead you to doing nothing. Get help — it's out there. ■

10 Questions for AARC President Brian Walsh

Photos by Lennie Sirmopoulos, Convention Photography, Tustin, CA



The next two years promise growth and development for the American Association for Respiratory Care

AARC President Brian Walsh, PhD, RRT-NPS, FAARC, took over the reins of the Association from Frank Salvatore, MBA, RRT, FAARC, at AARC Congress 2016 in San Antonio last fall. In the following interview, President Walsh outlines his plans for the organization over his two-year term in office.

During your inaugural address in San Antonio you stressed the need for the AARC to focus on safety, quality, and value. Why did you decide to make these factors central to your presidency?

President Walsh: After working in the profession for over 20 years and listening to many of my colleagues, it appears our value is often being questioned. Determining the value of a profession is difficult, as people are not intrinsically valued. We all have different values based on the opinion of others. It's heartbreaking to hear of RTs who are not valued and then to see that behavior reinforced in our government. I've been in a couple of places where I was not valued as an RT and was fortunate to be able to leave. But not everyone has that ability.

What's even more distressing is when RTs are not used to their full potential. Not only do our patients suffer, but the profession suffers as well. You've heard the old saying, "The ship is made for the sea, not the harbor." In other words, the value of the ship is only realized when it is at sea — not in the loading docks. The same goes for the RT. When RTs are not allowed to perform at their fullest potential, we don't achieve our ultimate value.

When I was pressed to demonstrate the value of the RT, I was able to narrow it down to two unquestionable influences. These influences are on the quality and safety of respiratory care. I firmly believe when respiratory care is provided by an RT functioning at the highest level, high quality is our natural output. High-quality care is always delivered in the safest way possible. When we deliver high-quality, safe care, our value becomes apparent to everyone. With value comes recognition, which many RTs desperately need.

Mechanical ventilation ranks high on your list when it comes to ensuring safety. What initiatives do you have

planned to ensure the safe administration of mechanical ventilation, and why do you believe they are needed?

First, it's sad to report that medical errors are the third leading cause of death in the United States.¹ If we are team players who are a valuable part of the health care system, we must take ownership of errors within our practice. One of the Joint Commission's National Patient Safety Goals — NPSG.06.01.01 — focuses on making improvements to ensure alarms on medical equipment are heard and responded to on time. This includes ventilator alarms. Most, if not all, RT departments are responsible for ventilator management and safety, and I believe these errors provide us a prime opportunity to show our true value. But we must step up, and we are doing just that.

Within the last six months we have joined forces with a group called the Association for the Advancement of Medical Instrumentation. They have a working group that has been looking into physiologic alarm safety, and we asked them to consider tackling ventilator alarm safety as well. They have agreed to do so, and the AARC has agreed to help. We have provided them with support in the form of member volunteers and travel grants and are looking to do more. The group will also be charged with bringing back best practices and recommendations to the AARC Board of Directors (BOD).

Another of your goals is to encourage the development of an Advance Practice Respiratory Therapist. Why do you believe this is important for the profession, and what will it mean to the respiratory therapists who become "APRTs"?

We are losing good respiratory therapists to other professions, as we don't have a new or revised career pathway to clinical advancement. The RRT and the numerous specialty exams were the clinical advancement pathways of the past, but today they are beginning to be used as entry level, as a new level of competence is being required. In fact, three states now require the RRT for new licenses to practice and six have dual — entry level and advanced — licensure.

As our performance requirements and volume and complexity of respiratory care grow, so too should

our education and credentialing. The APRT will provide another avenue of clinical advancement and professional growth — one that will allow us to match a perceived need with an individual whose foundation and practice is solidly within cardiopulmonary sciences and respiratory care at the mid-level provider status.

How does the development of the APRT dovetail with the new push to advance to a bachelor's degree entry level, and what will you do keep the momentum going for that entry level?

The APRT dovetails nicely with our bachelor's degree initiative, as the APRT will require a professional master's degree. You will also notice a central theme of continuing or more education. As a profession, we have done this before when recognizing that the certificate respiratory programs did not provide enough education to produce the quality of respiratory therapists that employers or our patients desired. If the bachelor's degree becomes entry level, the APRT will continue to allow for professional growth.

You also want to improve access to RTs across the board. Where do you think access is lacking today, and what specific actions will you take to ensure patients in those settings are better able to receive needed services from respiratory therapists?

Several obvious access limitations are home care, stand-alone emergency rooms/urgent care centers, outpatient clinics, and telemedicine. In most of these settings, access to RTs has been limited due to the current reimbursement model. If widely implemented and properly utilized, the new bundle payment system has the potential to change access to RTs because the health care system will be reimbursed for a condition over the full cycle of care and held accountable for their outcomes. If we demonstrate our value, then we will be used to provide care in those settings.

The AARC has worked tirelessly on legislation to recognize RTs outside of the traditional setting. I will continue this work by first focusing our efforts on the current telehealth legislation that's being considered. Additionally, I believe continuing to show our value to the health care system will ensure additional experimentation with our services in the limited access areas.

High-quality continuing education and respiratory care research figure into your plans as well. It is easy to see how RTs need continuing education, but how do you



believe more RT researchers and more funding for RT research can help the profession?

I often say 80 percent of what we do hasn't been shown to help our patients. We need to change this landscape. In a value-based health care delivery model, we will not be *allowed to provide, nor should we provide, services that have no benefit.* We also need to develop new and innovative ways of caring for our ever-evolving and more complex patient population, and we need to do it as efficiently as possible. And when we do find those new and innovative ways of delivering respiratory care, they cannot take 5–10 years for us to adopt. This is why I support the education that the AARC provides and oversees, as it is state of the art. The science of respiratory care changes monthly, and so should we if we want to continue to provide high-quality and safe care.

Membership continues to be a key concern for the AARC. What will your administration do to encourage more respiratory therapists to join the Association and maintain their membership over time?

We have focused on recruitment of members into our society, but have often neglected retention. We are going to refocus on the retention side of the equation. We

have also begun to sink a significant amount of money into our information technology infrastructure to better serve our members and provide us data on where we are doing well and where there are opportunities to improve services to our members.

I have restructured the Membership Committee to better reflect our current membership demographics in the hopes that they will be able to make better recommendations for improvement. We are going to embark upon a series of calculated risks to see if we can improve not only recruitment of new members, but also retention of existing members, all while developing a leadership pipeline that is so desperately needed. Hopefully, you will begin to see newer faces that more closely reflect our membership — people who will be able to develop strategies you will embrace.

Your presidential goals also cite a need to advance our international presence, work with other groups and organizations, and, perhaps most importantly, advocate for patients. How will all of these activities work in concert to improve the care received by people with pulmonary conditions?

Respiratory care providers come in all different forms and fashions. For example, our South American colleagues largely come from a physiotherapist background, with additional training in respiratory care. Some of our European colleagues come from nursing or physician backgrounds to provide respiratory care. Then you have our Canadian, Saudi Arabian, and United Arab Emirates colleagues, who have similar training and credentials as the respiratory therapist in the United States.

Over the years I have had the opportunity to learn a great deal from our international colleagues. The diversity of backgrounds and experiences makes us stronger as a profession. With today's technology we can communicate more effectively than ever. We hope to foster these relationships and continue to promote professional excellence, advance the science and practice, and serve together as an advocate for patients, their families, the public, and the profession.

Additionally, we will continue to work closely with other organizations, such as, but not limited to, the American Respiratory Care Foundation, COPD Foundation, International Council on Respiratory Care, American Society of Anesthesia, American Thoracic Society, National Board for Respiratory Care, Commission on Accreditation for Respiratory Care, American College of Chest Physicians, and Society for Critical Care Medicine. Through these partnerships we

hope to develop better clinical practices to improve the care of the patients we serve.

Ask respiratory therapists whether more should be done to raise awareness of their profession and the role they play in health care in general, and most will say, “yes.” How will you address this issue during your term as president?

This is one of the harder questions to answer; it has always stumped me as to why we haven't received more recognition. For so long, we have been the men and women behind the scenes getting the work done. We have worked without recognition or fanfare, and most of us like it that way. However, there has been a negative effect from this behavior. Individuals who don't understand the practice of respiratory care often think they can do it without us. This is simply not true. Our patients still need respiratory care, and when we are not providing it, someone else is, and they are likely less experienced or educated at it, which lowers the quality of care.



AARC PRESIDENT BRIAN WALSH: VITAL STATISTICS

Brian Walsh earned a certificate in respiratory from Central Virginia Community College and his AAS degree in respiratory care from J. Sargeant Reynolds Community College, then went on to earn a bachelor's degree from Old Dominion University.

He received his PhD from Rush University. Dr. Walsh currently serves as a research coordinator at Boston Children's Hospital and an assistant professor of anesthesia at Harvard Medical School. ■

We have partnered with the COPD Foundation and the Leonard Nimoy family in raising COPD awareness through a film titled "COPD: Highly Illogical." Within this film the role of the respiratory therapist is highlighted. It is our hope that this film will be viewed thousands of times, raising not only COPD awareness, but also awareness of the role respiratory therapists play in the management of patients suffering from COPD.

We are also making inroads into Hollywood by calling out inaccuracies in shows about the practice of respiratory care. I know I do it with my family all the time — it drives them crazy, but it doesn't go any farther than my living room. We have recently learned that many in Hollywood want to get it right and pride themselves on producing accurate programs. We have a BOD member who has a Hollywood connection and is willing to provide details to them regarding inaccuracies involving our profession. Now all we need is a few binge watchers to help provide this information.

Within the federal government, we continue to be very active in lobbying for you. We respond to all requests

for comment on appropriate legislation. Annually, we lobby Congress to ensure that everyone on Capitol Hill knows who a respiratory therapist is. Starting the first of the year, we are going to share with you our numerous letters written on your behalf — which take hours, if not weeks, to prepare — on our website for you to digest.

No AARC president has ever been able to accomplish their goals without the support of the membership. What would you like the membership to know about the vital role they will play in helping you achieve everything you want to achieve in the next two years?

No truer words could be said. Simply put, we need your involvement. Apathy within our profession has injured us. If you don't have the time, then please pay your membership dues so we can hire or provide the means for someone to advocate on your behalf. If you have some time and are willing to volunteer, please start locally, but think nationally. There is a place for everyone!

Our system of representatives for each state, called the House of Delegates (HOD), has been established to gather your input and run ideas to and from your state board and the AARC. If passed by the HOD, those ideas, called resolutions, are presented to the BOD for further action. The best ideas often come from best practices or the practicing, boots-on-the-ground respiratory therapists. To keep the AARC moving in the direction you would like it to move, we need your input and involvement. We can't do this without you! ■

Reference

1. Makary MA, Daniel M. Medical error: the third leading cause of death in the US. *BMJ* 2016;353:i2139.





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AARC Congress 2016: It Was All About the Patient

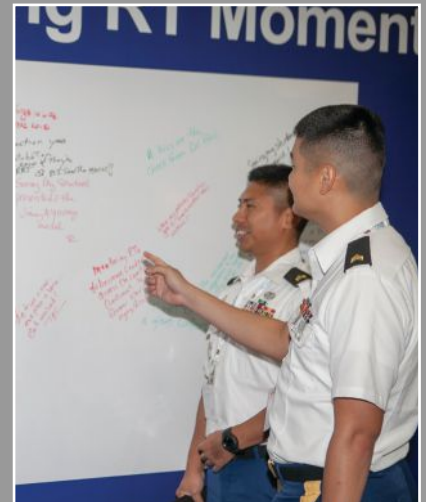
by Debbie Bunch

Patient care took precedence at AARC Congress 2016, as respiratory professionals came together to address everything from COPD readmissions to new technology that could revolutionize critical care. Whether it was advocating for patients in the second annual Respiratory Patient Advocacy Summit, listening to a leading physician describe the most recent advancements in extracorporeal membrane oxygenation, sitting in a session covering the key components of a patient education program, or strolling through an exhibit hall with all the latest in respiratory care products and services, attendees knew they were there to improve the care they deliver to their patients every day on the job.

“Our 62nd Congress delivered the knowledge and information respiratory therapists need to ensure their patients are receiving the highest quality of care available, and those who attended the meeting in San Antonio walked away with a lot of ideas they could take back to their organizations and use to enhance the services they provide,” said AARC 2016–2018 President Frank Salvatore. “This gold standard meeting in respiratory care once again proved its ability to reenergize the RT workforce, making us all better clinicians, managers, educators, and researchers for the people with lung disease who depend on our care.”

Turn the page for highlights from AARC Congress 2016. ■

Photos by Lennie Sirmopoulos, Convention Photography, Tustin, CA





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LEARN MORE: <http://c.aarc.org/go/pde>

Well Done, You!

The AARC Congress is always a time to recognize those among us who go above and beyond for the respiratory care profession. The 2016 meeting in San Antonio was no different, as a number of standout professionals and companies received special honors and awards.

Photos by Lennie Sirmopoulos, Convention Photography, Tustin, CA



Congratulations, 2016 Award Recipients!

The AARC, NBRC, and CoARC handed out a host of awards to outstanding professionals in respiratory care during the annual awards ceremony that kicked off the Congress on Saturday morning, October 15.

- Jimmy A. Young Medal: John D. Hiser, MEd, RRT, FAARC
- NBRC/AMP William W. Burgin Jr. MD and Robert M. Lawrence MD Education Recognition Award: Nkiruka M. Achionye
- William F. Miller MD Postgraduate Education Recognition Award: Kevin P. Collins, MS, RRT, RPFT, AE-C
- NBRC/AMP Gareth B. Gish MS RRT Memorial Postgraduate Education Recognition Award: Tabatha M. Dragonberry, MEd, RRT-NPS, AE-C, ACCS, CPFT, C-NPT
- Morton B. Duggan Jr. Memorial Education Recognition Award: Kelli E. Sloan, BA
- Jimmy A. Young Memorial Education Recognition Award: Bethany S. Kosary
- Charles W. Serby COPD Research Fellowship: Alan H. Greene, RRT
- Monaghan/Trudell Fellowship for Aerosol Technique Development: Gregory Burns, RRT
- Philips Respiroics Fellowship in Mechanical Ventilation: Gerald Moody, BSRC, RRT-NPS
- Philips Respiroics Fellowship in Non-Invasive Respiratory Care: Shelia Ball, BSRT, RRT, NPS, RC
- CareFusion Fellowship for Neonatal and Pediatric Therapists: Kathryn E. Clark, BS, RRT-NPS
- Forrest M. Bird Lifetime Scientific Achievement Award: Marin H. Kollef, MD
- Dr. Charles H. Hudson Award for Cardiopulmonary Public Health: John R. Garrison, MPA
- Thomas L. Petty MD Invacare Award for Excellence in Home Respiratory Care: Nicholas J. Macmillan, BGS, RRT, FAARC
- Mike West MBA RRT Patient Education Achievement Award: Krystal Craddock, RRT-NPS, CCM
- Jeri Eiserman RRT Professional Education Research Fellowship: Robert T. Dailey, MHA, RRT
- Mallinckrodt Best Paper Award by Best First Author: David M. Burnett, PhD, RRT, AE-C
- Draeger Literary Award: Mollie Gowan, PharmaD
- Albert H. Andrews Jr. MD Memorial Award: Carl A. Kaplan, MD, FCCC
- Dr. Ralph L. Kendall Outstanding Site Visitor Award: Tom Baxter, EdD, RRT



The Jimmy A. Young Medal was awarded to John D. Hiser, MEd, RRT, FAARC (right).



The Education Recognition Award recipients were Nkiruka M. Achionye, Tabatha M. Dragonberry, Bethany S. Kosary, Kelli E. Sloan, and Kevin P. Collins.



The Forrest M. Bird Lifetime Scientific Achievement Award went to Marin H. Kollef, MD.



The Thomas L. Petty MD Invacare Award went to Nicholas J. Macmillan, BGS, RRT, FAARC.



The Mike West MBA RRT Patient Education Achievement Award went to Krystal Craddock, RRT-NPS, CCM.

- Héctor León Garza MD Achievement Award for Excellence in International Respiratory Care: Alberto Juan Lopez Bascope, MD
- International Fellows: Jingen Xia, MS, RRT; Julita V. Toledo, RMT, RTRP, MPA; Marina Labor, MD, PhD
- Specialty Practitioners of the Year: Adult Acute Care, Ron Pasewald, BS, RRT, RRT-ACCS; Continuing Care/Rehabilitation, Debbie Koehl, MS, RRT-NPS, FAARC; Diagnostics, Ralph W. Stumbo, Jr., RRT, CPFT; Education, David L. Vines, MHS, RRT, FAARC, FCCP; Long-Term Care, Kelly D. Cummings, RRT; Management, Julie Jackson, BAS, RRT-ACCS; Neonatal-Pediatrics, John T. Gallagher, MPH, RRT-NPS, FAARC; Sleep, Jessica M. Schweller, MS, RRT, RN, CNP; Surface & Air Transport, Jon C. Inkrott, RRT-ACCS
- Zenith Awards: Aerogen, CareFusion, Draeger, Fisher & Paykel, Monaghan Medical, Philips Respirionics
- Honorary Membership: Bruce K. Rubin, MD, MBA, FAARC
- Life Memberships: Colleen L. Schabacker, BA, RRT, FAARC; George W. Gaebler, MSEd, RRT, FAARC
- AARC Fellows: Mohammed Al Ahmari, PhD, RRT, CTTS, FAARC; R. Kevin Fischer, BS, RRT; Gene Gantt, RRT; Russell Eli Graham, BSRC, RRT, CPFT; Albert J. Heuer, PhD, MBA, RRT, RPFT; Fred Hill, MA, RRT-NPS; Christy Kane, PhD, RRT-NPS; Chuck Menders, RRT-ACCS, AE-C; Matthew J. O'Brien, MS, RRT, RPFT; Diane R. Oldfather, MEd, RRT, FAARC; David M. Wheeler, MEd, RRT-NPS; Kari Woodruff, BSRC, RRT-NPS

Another group of exceptional professionals was recognized in a separate awards ceremony that took place during the Association's Annual Business Meeting on October 16.

- Outstanding Affiliate Contributor: Sheri Tooley, BSRT, RRT-NPS, FAARC
- Jerry Bridgers Delegate of the Year: Teresa Joiner Miller, MEd, RRT, CPFT
- Bill Lamb Award for Community Service: Anthony Everidge, BA, RRT-NPS
- Summit Award: Texas Society for Respiratory Care



The Héctor León Garza MD Achievement Award went to Alberto Juan Lopez Bascope, MD.



International Fellows Marina Labor, MD, PhD; Julita V. Toledo, RMT, RTRP, MPA; Jingen Xia, MS, RRT.



Dr. Ralph L. Kendall Outstanding Site Visitor Award was given to Tom Baxter, EdD, RRT.



Specialty Practitioners of the Year were Ron Pasewald, Debbie Koehl, Ralph W. Stumbo, Jr., David L. Vines, Kelly D. Cummings, Julie Jackson, John T. Gallagher, Jessica M. Schweller, Jon C. Inkrott, and Joseph Hylton.

62nd International Respiratory Convention & Exhibition



Fellows of the AARC (FAARC).



Life Membership was awarded to Colleen Schabacker, BA, RRT.



Outstanding Affiliate Contributor: Sheri Tooley, BSRT, RRT-NPS, FAARC.



Jerry Bridgers Delegate of the Year: Teresa Joiner Miller, MED, RRT, CPFT.



Bill Lamb Award for Community Service: Anthony Everidge, BA, RRT-NPS.



AARC Zenith Award Winner: Aerogen.



AARC Zenith Award Winner: CareFusion.



AARC Zenith Award Winner: Dräger.



Philips Respironics Fellowship in Mechanical Ventilation: Gerald Moody, BSRC, RRT-NPS.



AARC Zenith Award Winner: Fisher & Paykel.



AARC Zenith Award Winner: Monaghan Medical.



AARC Zenith Award Winner: Philips Respironics.



Jeri Eiserman RRT Professional Education Research Fellowship: Robert T. Dailey, MHA, RRT.

2017 AARC Officials Installed

Brian Walsh, PhD, RRT-NPS, FAARC, was inducted as our new president during the Annual Business Meeting, and these new officials were also welcomed to their posts: Natalie Napolitano, MPH, RRT-NPS, AE-C, CTTS, FAARC, vice president internal affairs; Sheri Tooley, BSRT, RRT-NPS, CPFT, AE-C, vice president external affairs; and Karen Schell, DHSc, BSRC, RRT-NPS, RRT-SDS, RPFT, RPSGT, AE-C, CTTS, secretary/treasurer. Susan Rinaldo Gallo, MEd, RRT, CTTS, FAARC, and John Wilgis, MBA, RRT, are our new directors-at-large.

Four Specialty Sections also held elections in 2016, and these individuals were elected: Carl Hinkson, MSc, RRT-ACCS, RRT-NPS, FAARC (Adult Acute Care Section); Georgianna Sergakis, PhD, RRT, CTTS, FAARC (Education Section); Katrina Hynes, MHA, RRT, RPFT, (Diagnostics Section); and Cheryl Hoerr, MBA, BSRT, RRT, CPFT, FAARC (Management Section).

The new House of Delegates officers are: Speaker, Keith Siegel, MBA, RRT, CPFT; Speaker-elect, Teri Miller, MEd, RRT, CPFT; Secretary, Kerry McNiven, MS, RRT; and Treasurer, Dana Evans, MHA, RRT-NPS. Jacklyn Grimball, MA, RRT, AE-C, is now the past speaker. ■



The Monaghan/Trudell Fellowship for Aerosol Technique Development Award went to Gregory Burns, RRT.



The Albert H. Andrews Jr. MD Memorial Award was given to Carl A. Kaplan, MD, FCCC.



Philips Respironics won "Best of Show" among the Exhibit Hall booths.

2017 Corporate Partners Welcomed

The AARC's Corporate Partners for 2017 are CareFusion, Masimo, Medtronic, Monaghan, Philips Respironics, Draeger, Maquet, Teleflex, Boehringer Ingelheim Pharmaceuticals, AstraZeneca, Mallinckrodt Pharmaceuticals, ResMed, and Fisher & Paykel Healthcare. All of these companies are best-in-class organizations interested in supporting the goals and work of the Association. The program provides respiratory care providers with information, insight, and innovative approaches to improve performance and advance the health of their patients. ■

Top Respiratory Care Companies Recognized with AARC Zenith Award

The 2016 Zenith Award, our people's choice award, was presented to Aerogen, CareFusion, Draeger, Fisher & Paykel, Monaghan Medical, and Philips Respironics. All of these companies were selected by AARC members on the basis of the quality of their products, accessibility of their sales staff, responsiveness, service record, truth in advertising, and support of the respiratory care profession. ■



The Philips Respironics Fellowship in Non-Invasive Respiratory Care: was awarded to Shelia Ball, BSRT, RRT, NPS, RC.



Best of Show Second Place went to HillRom.



The Mallinckrodt Best Paper Award by Best First Author went to David M. Burnett, PhD, RRT, AE-C.



Best of Show Third Place went to SoClean.

— 2017 —

Since 1947, the AARC has been leading the effort to advance the science and practices of the respiratory care profession while promoting the highest quality of care for our patients. Collaborating with the respiratory communities at-large, we have successfully advocated at the federal, state and local level for patients, their families, the community, the profession and the respiratory therapist.

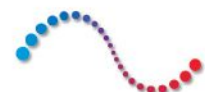
The AARC'S CORPORATE PARTNERS

The collaborative efforts between the respiratory care profession and manufacturers in pursuing unique and innovative ways to improve both the quality and outcomes of our patients makes us natural partners in today's ever changing healthcare continuum.

As health care finances become more strained and patient care becomes increasingly more complex, the mutual challenges become greater for the profession and its industry partners. The inherent synergies of the corporate partner concept are to provide an effective and efficient way to address those needs utilizing our combined skills and resources.



GETINGE GROUP



*Changing lives
with every breath*



Spectacular Special Events

AARC Congress 2016 featured more than 250 lectures and symposia on the hottest topics in respiratory care, but it was also studded with lots of special events that took attendees out of the typical meeting experience and into an extraordinary realm that can only be found at the respiratory care profession's premiere meeting of the year.

Photos by Lennie Sirmopoulos, Convention Photography, Tustin, CA





Pre-courses Get Things Going

Attendees who arrived a day early had the chance to attend one of three AARC pre-courses designed to deliver even more cutting-edge information to respiratory professionals.

“Arterial Fundamentals: Ultrasound-Guided Arterial Catheter Insertion” provided the knowledge RTs need to perform ultrasound scanning to identify anatomical structures, verify vessel health, and identify the appropriate insertion area. Attendees at “Lung Protection, VILI, and Alveolar Protection: The Good, the Bad, and the Better” walked away with the ability to explain the mechanisms by which the mechanical breath causes tissue damage at the alveolar level, to describe how the parameters that comprise the mechanical breath can be adjusted to minimize ventilator-induced lung injury (VILI), and to manipulate airway pressure release ventilator settings to maximize alveolar protection from VILI. The workshop on “Preparing for a Pandemic: The Strategic National Stockpile: Mechanical Ventilation” delivered hands-on experience with the Strategic National Stockpile Ventilators that will be used to mechanically ventilate victims in the event of a natural or man-made disaster.

All of the Congress pre-courses were approved for CRCE credits. ■



Patients Have Their Say

The second annual Respiratory Patient Advocacy Summit convened the evening before the Congress began and gave people with chronic respiratory conditions the opportunity to voice their concerns and hear about new developments from experts gathered for the meeting.

In addition to a presentation on asthma delivered by Asthma & Allergy Network CEO Tonya Winders — a mother of children with the disease — father/daughter RRTs Mark and Kimberly Mangus shared their personal journey through not one but two double-lung transplants that Kimberly has received as a result of her life-long battle with cystic fibrosis. A moderated roundtable featuring RTs specializing in specific areas of practice took on the issues of CF and COPD telehealth, COPD case management, and pulmonary rehabilitation, with COPD patient Bill Clark joining in to provide the patient's perspective on community support.

The Summit was sponsored by Platinum Sponsors Sunovion, Boehringer Ingelheim, and Novartis Pharmaceutical; Silver Sponsors Gilead, Mylan, and Vertex; and Contributing Sponsors Chiesi and the COPD Foundation. ■



Raising Money for Scholarship and Research

Nearly 400 people came together in a one-of-a-kind venue right in the heart of the San Antonio convention center on the night before Congress began to support the American Respiratory Care Foundation (ARCF). The Texas-inspired Grotto proved to be the perfect place for supporters to gather for a fabulous meal and brief program honoring ARCF donors and highlighting ARCF activities. Everyone at the event also received a raffle ticket that put them in the running for one of three grand prizes. Clair Aloan went home with a fabulous Marriot Vacation Package. Lenny Nyangwara received a voucher for a hotel suite at AARC Congress 2017 in Indianapolis, IN; and Amanda Richter won two pairs of customized cowboy boots.

Additional raffle tickets were also sold for a guitar signed by none other than country and western star Billy Dawson, who not only participated in the entertainment for the evening but also shared a personal story of how respiratory therapists impacted his family. Susie MacIntyre was the lucky winner of the autographed guitar. The Night at the Grotto was sponsored by Vapotherm. ■



AARC Sets a Guinness World Record!

Attendees of the Congress Opening Ceremonies were able to participate in something few people ever have the chance to do — set a world record! In this case, it was the record for “the most people blowing pinwheels simultaneously,” and an official from Guinness World

Records® was there to document the achievement and present the award to the AARC. The goal was to draw attention to lung disease by symbolizing the act of breathing — and we did it! The AARC thanks the COPD Foundation for donating the pinwheels for the event. ■



Fantastic Technology Wows Visitors in the Exhibit Hall

The exhibit hall at AARC Congress 2016 proved to be the place to see, hear, touch, and sometimes even try out the latest in respiratory care technology. All the leading

companies in the industry were there, and special deals were a part of it, too, helping some attendees cover the cost of their trip to San Antonio! ■



J.R. Martinez Inspires Audience With Stories of Perseverance

Inspiration comes in many forms. Those who attended the Keynote Address rose to their feet to welcome Iraq War veteran J.R. Martinez to the stage and thank him. Inspiration comes in many forms.

The Dancing with the Stars Mirror Ball trophy winner thanked the audience, then turned the tables and asked them to remain standing because he knew there were many other veterans in the room who also deserved appreciation.

He went on to relate his experiences in Iraq, where the Humvee he was riding in back in 2003 hit a roadside bomb, leaving him with severe burns and smoke inhalation. He

spent the next 34 months in recovery at Brooke Army Medical Center in San Antonio, where he received the treatment that helped him regain his health and his life. He talked about health and wellness and the important role clinicians play in the lives of their patients. He thanked therapists for what they did for him, and he urged them to invite challenge into their lives and their careers. "Next time you go into a patient's room, talk with them and earn their trust. Just remember, you're saving lives every single day," he told the audience. "You make a difference every day in your patients' lives." ■



Paying Our Respects

AARC members serving our country as a part of the military community today, as well as those who have given their service in the past, were honored during a special flag-folding ceremony on the third day of Congress. AARC member Joseph Buhain, EdD, MBA, RRT, FAARC, presided over the proceedings. Among the special honorees was Thomas Wallsmith, the only RT ever known to have been killed in the line of duty. ■



Big Lectures Cover Big Topics

The three plenary sessions at the meeting delved into key areas of concern for respiratory therapists.



Thomas L. Petty Memorial Lecture

Pulmonary Rehabilitation: Where We've Succeeded and Where We've Failed

Research has confirmed the benefits of pulmonary rehabilitation. Medicare began covering pulmonary rehabilitation programs in 2010. Many patients have sung its praises. The fact remains, however, that pulmonary rehabilitation is available to only a handful of patients who could benefit from it.

Richard Casaburi, MD, MEng, PhD, reviewed the scientific literature on pulmonary rehab and shared his view on why these programs are not more widely used to bring health and life back to people with chronic lung disease in the Association's Annual Thomas L. Petty Lecture. Dr. Casaburi also talked about the role that smoking cessation and inhaled bronchodilators play in the care of COPD patients.

Dr. Casaburi is chief of the division of respiratory and critical care physiology and medicine at the Harbor UCLA Medical Center in Los Angeles, CA. He has published more than 123 papers and 112 abstracts in peer-reviewed journals and is a member of the editorial board for the *American Journal of Respiratory and Critical Care Medicine* and the *Journal of CardioPulmonary Rehabilitation*. ■



Phil Kittredge Memorial Lecture

The Future of Mechanical Ventilation for ARDS

Mechanical ventilation for people suffering from the acute respiratory distress syndrome (ARDS) is a bit like the proverbial catch-22. While those with acute lung disease must be mechanically ventilated to have a chance at survival, mechanical ventilation itself can cause lung injury.

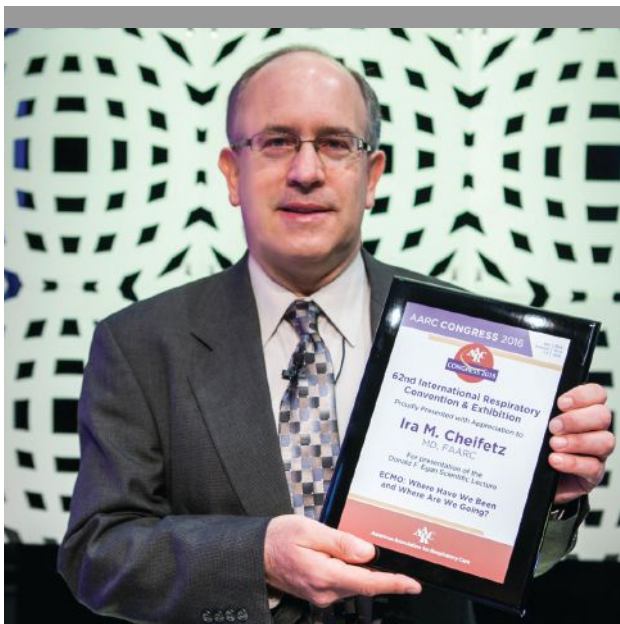
Lung-protective ventilation has been hailed as the solution, but morbidity and mortality from ARDS remain unacceptably high. In this year's Kittredge Lecture, Eddy Fan, MD, reviewed the evolution of lung-protective ventilation and shared upcoming evidence-based guidelines that are expected to direct clinicians on its administration. He discussed new research that may help shape the way we mechanically ventilate ARDS patients in the future.

Dr. Fan is a professor in the University of Toronto's Institute of Health Policy, Management, and Evaluation, and he has a special interest in advanced life support for patients with severe acute respiratory failure. He has published 100 papers in peer-reviewed journals.

Papers based on all three of these plenary sessions will appear in 2017 editions of the AARC's science journal, *RESPIRATORY CARE*. ■

Donald F. Egan Scientific Memorial Lecture

ECMO: Where Have We Been and Where Are We Going?



They're smaller, safer, and easier to use than ever before. Extracorporeal membrane oxygenation (ECMO) life support devices have changed dramatically over the past five years, and Ira M. Cheifetz, MD, FAARC, FCCM, outlined these advancements in the Egan Lecture, bringing everyone up to speed on this most astonishing aspect of critical care.

In addition to highlighting aspects of the new technology that now allow patients to receive extracorporeal life support while awake and, in some cases, even ambulatory, Dr. Cheifetz gave his audience a glimpse into the future and what we can expect from these devices and their application in patients whose lungs need a respite to recover going forward.

Dr. Cheifetz is a pediatric critical care medicine specialist at Duke Health in Durham, NC. He has published more than 100 papers in peer-reviewed journals, many of them focused on extracorporeal membrane oxygenation. He has also served as Program Committee chair for the AARC Congress on many occasions and was also the 2016 chairman. ■



The OPEN FORUM Top Ten

The top ten submissions to the 2016 OPEN FORUM were presented during the prestigious Editors' Choice session on Oct. 17. Authors reviewed their findings for each study in eight-minute slide presentations followed by five minutes of Q & A. Here are the top ten submissions for 2016.

Supraglottic Airway Placement by Respiratory Therapists for In-Hospital Cardiac Arrests Decreases Time to Continuous Cardiopulmonary Resuscitation
— William Rosandick, MSc, Granton, WI

Interdisciplinary Approach to Early Detection of Sleep-Disordered Breathing in a Select Patient Population
— Bridget Gekas, BHSc, Swarthmore, PA

Assessing Initial Response to High-Frequency Jet Ventilation in Premature Infants With Respiratory Failure
— Craig Wheeler, Jr., Boston, MA

Impact of a Respiratory Therapy Assess and Treat Protocol on Cardiothoracic Readmissions
— Robert Dailey, MHA, Charlottesville, VA

The Impact of Pharmacy and Respiratory Therapy Education on 30-day Hospital Readmission
— Richard Rice, RRT, MEd, Cleveland, OH

Spontaneous Breathing Trials and Conservative Sedation Practices Reduce Mechanical Ventilation Duration in Patients With Acute Respiratory Distress Syndrome
— Vivian Yip, San Francisco, CA

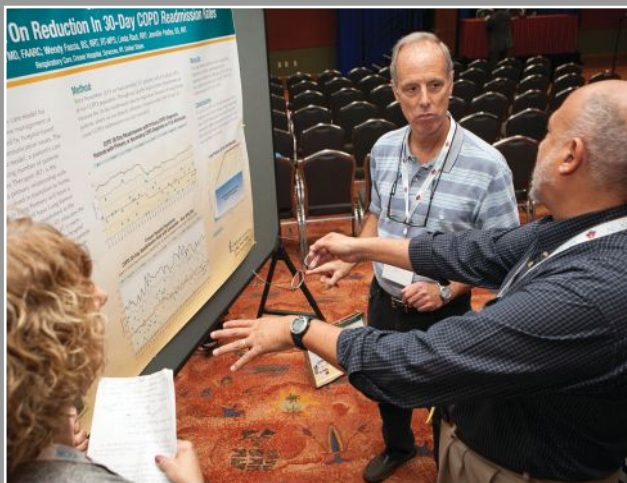
Severity of Hypoxemia in Acute Respiratory Distress Syndrome Influences the Percentage of Patients Who Respond to Aerosolized Prostacyclin
— Gregory Burns, San Francisco, CA

A Respiratory Care Practitioner Disease Management Program for Patients Hospitalized With COPD
— Peggy Watts, MSc, St. Louis, MO

Evaluation of Endotracheal Tube Scraping on Airway Resistance and Weaning Trial Success in Difficult to Wean Mechanically Ventilated Patients
— J. Brady Scott, MSc, Chicago, IL

General Care Improvement Project: COPD 30-Day Readmissions. Search for G.O.L.D.
— Kris Hammel, RRT, Rochester, MN

The OPEN FORUM was supported by an unrestricted educational grant from Monaghan.



Beyond Borders

AARC Congress 2016 truly was an international meeting, with speakers, exhibitors, and attendees from all over the world. Respiratory care researchers from the United States were able to network with their colleagues from abroad about everything from mechanical ventilation to reducing readmissions for COPD patients. The exchange of information should help inform respiratory care both here and in other nations.

One of the best places to see the wide range of international participation was in the 2016 OPEN FORUM, where these international colleagues presented their work:

Hassan Al Gazwi, Dammam, Saudi Arabia
 Huiqing Ge, Hangzhou, China
 Usra Naeem, Nottingham, United Kingdom
 Hui-Ling Lin, Taoyuan, Taiwan
 Fahad Alahmadi, Medinah, Saudi Arabia
 Chin-Jung Liu, Taichung, Taiwan
 Naif Alruwaili, Shakaka Aljouf, Saudi Arabia
 Juvel Taculod, Singapore
 Tatsuya Ishizuka, Tokyo, Japan
 Yoshihiro Aramaki, Tokyo, Japan
 Yu-Jen Chang, Changhua City, Taiwan
 Yi-Hao Peng, Taichung, Taiwan
 Kazuto Aishima, Kanagawa, Japan
 Hsiao Ling Chia, Taichung, Taiwan
 Takamitsu Kubo, Sunto-gun Nagaizumi-cho, Japan
 Ling-Yu Hsieh, Taichung, Taiwan
 Edgar Bautista, Mexico City, Mexico
 Mauo-Ying Bien, Taipei, Taiwan
 Sandra Palacio, Cali, Colombia
 Jun Yoshioka, Yamagata-shi, Japan
 Seung Kwon Hong, Incheon, Korea
 Chi-Hao Chang, Kaohsiung, Taiwan
 Hee Jung Suh, Seoul, Korea
 Ai-chin Cheng, Tainan, Taiwan

Attendees also enjoyed presentations from three international speakers: Thomas Piraino, RRT, FSCRT, and Eddy Fan, MD, from Canada, and Asaji Nishimura, PhD, MD, from Japan. The AARC also welcomed three new International Fellows to the Congress: Jingen Xia, MS, RRT, Julita V. Toledo, RMT, RTRP, MPA, and Marina Labor, MD,



2016 International Fellows

PhD. Many thanks go to the sponsors who continue to support the International Fellowship Program with their generous contributions: AARC, AARC House of Delegates, Teleflex, NBRC, and Philips Respironics.

An international reception honored all of the international guests at the meeting, and the 2016 Toshihiko Koga MD International Medal was awarded to Lisa M. Trujillo, DHSc, RRT, for her work in Ghana. Trujillo has spearheaded a years-long effort to help health facilities upgrade their respiratory services and to work with the educational system to launch a program to train respiratory therapists to serve the country. ■

Florida Wins the National Sputum Bowl!

The 2016 Sputum Bowl pushed the excitement level at the meeting into overdrive as the top teams in the competition went head to head on finals night to see who possessed the most knowledge in respiratory care. Attendees had a great time dressing up in their best outfits from the 1980s for the “Rockin’ the ’80s” theme. When it was all over, these teams came out on top:

National Sputum Bowl

First place: Florida

Second place: Michigan

Third place: Colorado and Missouri

Student Sputum Bowl

First place: Minnesota

Second place: California

Third place: Texas and Michigan

Congratulations to the Sputum Bowl winners! The AARC thanks Medtronic for sponsoring this event. ■



Indianapolis, Here We Come!

AARC Congress 2016 may have just ended, but it's not too early to start thinking about AARC Congress 2017. As the Association caps off a year of celebrations for its 70th anniversary as an organization, we'll be in **Indianapolis, IN, Oct. 4-7** for our 63rd International Respiratory Convention & Exhibition, and the city promises to welcome us with open arms.

Known best for its Indy 500 racing event, Indianapolis is the perfect place to gather for great education and fun times with friends and colleagues. Rated the number one convention city in America by *USA Today*, there's something for everyone in Indianapolis. From the famous Indianapolis 500 speedway and the Hall of Fame Museum adjacent to it, to

world-class art museums, the three-mile Central Canal, the Indianapolis Zoo, Lucas Oil Stadium (home of the Colts!), the Indiana War Memorial, and more — you'll find plenty to explore during the meeting.

All the hotels are interconnected with the convention center through sky bridges. More than 200 restaurants covering all tastes and budgets are within a short walk of the convention center.

Stay tuned to future issues of *AARC Times* and the AARC website for more information on Congress 2017 as it becomes available. Register by May 5 for the biggest savings on registration! ■



See You Next Year!







Rising to the Occasion

September 11, 2001, proved to be a pivotal day in the life of AARC Congress Closing Ceremony Speaker Richard Picciotto

By Debbie Bunch

When the ambulance carrying FDNY Battalion Chief Richard Picciotto pulled up to the emergency room at St. Vincent's Hospital in Manhattan on 9/11, he says it was greeted by doctors, nurses, and yes, respiratory therapists, too, standing ten deep waiting to care for victims of the terror attack on the World Trade Center. Whether they were on duty that day or not, these health professionals and thousands of others in and around New York City, Washington, DC, and Shanksville, PA, rallied around their facilities, dedicated to being there to help those in need.

That Picciotto's ambulance was one of the very few that made it to the hospital on that fateful day is a testament to the devastation. While thousands of people lost their lives in the attacks — 2,606 in New York City alone — the number of injured was low. How did Richard Picciotto end up one of them? He related his 9/11 story to attendees at the Closing Ceremony at AARC Congress 2016 in San Antonio last October, and it is a tale that will go down in the history books as one of our nation's great acts of heroism and valor.

“You have to send me”

Picciotto's day had started like it always did when he was on duty at his firehouse on the city's upper west side. His shift was scheduled to begin at 9 a.m., but he was

The United States marked the 15th anniversary of the 9/11 terrorist attacks last September. In October, the highest-ranking Fire Department of New York (FDNY) battalion chief to make it out of the World Trade Center alive took the podium at AARC Congress 2016 to share his experiences on that fateful day.

there early, taking a report from the fire chief going off duty and then visiting with fellow firefighters over a cup of coffee. But September 11, 2001, was not to be a normal day. When the news came in that a plane had just hit the North Tower of the World Trade Center, he knew he needed to be there. “My thoughts go back to 1993 — I was one of the first on scene at the World Trade Center bombing,” recalled the fire chief. “I knew the complex. I said, ‘You have to send me.’”

Picciotto arrived on the scene shortly thereafter and asked the chief on duty what he could do. People were trapped above the 23rd floor, he was told. Go up and assess the situation. The problem was getting up there. With only three stairwells — A, B, and C — the World Trade Center was not built to move people up and down on foot. But most of the 99 elevators were out of commission, so that was the only way to go.

He started up stairwell C with a small band of firefighters. Given that each stairwell was only about 36-40 inches

wide and hundreds of people were fleeing down to safety, it was slow going, to say the least. The humanity he witnessed along the way was inspiring. People were helping each other make the trek downward, carrying the injured when necessary.

By the time he reached the 20-23rd floor, he knew he would have to go higher to help the people who were most

in need. He knew he had to get up to where the fire was, the 90th floor. At that point, he decided to break away from his company and head up there, thinking he would be able to move faster on his own. Picciotto explained to the audience that, as chief, he was only carrying about 60 pounds of gear, as opposed to the typical firefighter's 100 pounds.

The path upward was grueling in the overwhelming heat. About every fifth floor he stopped to take a breather and look around to ensure no one had been left behind. Other firefighters on the scene were doing the same thing. When he got to the 35th floor, he found nothing but thick black smoke. "People were trapped and jumping," he said. Then the whole building started to shake and an awful banging noise enveloped everyone and everything. "I could feel the noise," he said. "Banging, shaking, and then it stopped. The silence was deafening. You could hear a pin drop."

Picciotto said he and everyone else froze in their tracks and stared up at the ceiling. As the chief on site, firemen were looking to him for an answer, but he didn't know what it was, and until he could find out, he didn't know what they were going to do.

He got on his radio, but since FDNY radios at the time could only transmit about 15 floors up and down from their location, he wasn't sure anyone was even hearing him. Soon, however, he got the word no one ever expected. The South Tower had just come down. "My first thought was, how many friends of mine just died? How many people just died?" he told a quiet audience.

Toughest order

Thinking back to his experiences with the 1993 Trade Center bombing, he assumed it was a bomb that had caused the building to go down, and if there was one in the South Tower, there was probably one in the North Tower, too. Of course, that wasn't the case — the massive amount of fuel from the airplanes caused the buildings to collapse — but Picciotto decided it was time to evacuate. That meant the firefighters, too. "We take calculated risks," emphasized the fire chief. "And as far as I'm concerned, that calculation had just changed." Despite the



Congress Closing Ceremony speaker Richard Picciotto of the FDNY related his harrowing experiences the day the Twin Towers fell.

fact that the North Tower had already been on fire for an hour by the time the South Tower collapsed and it was unlikely there were many — if any — survivors left on the higher floors, it still wasn't an easy decision. "It was the toughest order I ever gave, because if we're not coming to get those people trapped above, no one is," he said.

He and the other firefighters started down stairwell C. When they reached the 19th floor, suddenly everyone stopped dead in their tracks. Picciotto shouted for people to keep moving, but it soon became apparent that was not possible. When the South Tower collapsed, the dust and debris sank to the basement and subbasement, but then mushroomed back up and began filling the surrounding buildings, including the North Tower. The stairwell was now impassable. Picciotto ran to stairwell A and found the same situation. Then he ran to stairwell B. It was still

moving, so he directed everyone to get out of the other stairwells and head to B.

At the 12th floor he was met by a firefighter who said, “Chief, we have a problem here.” In an office near stairwell C he found 30–40 disabled and infirm people just sitting there. They couldn’t move on their own and had eventually just congregated in one place. Amazingly, each disabled person there was accompanied by an able-bodied person who refused to leave him behind.

Picciotto quickly dismissed all the helpers and put firefighters to work assisting the disabled people down the stairwell. He joined them, and then the shaking and banging noise they had all experienced when the South Tower went down began again — only this time harder and louder. The lights also went out, so it was all happening in pitch black. Picciotto says he thought about his wife and kids, and he began to pray, “Please God, make it quick.”

Eight seconds after the shaking and banging started, it was over and the North Tower lay in ruins. When everything had gone silent, he realized he was still alive, trapped in those ruins on the 7th floor with 11 other firefighters, a Port Authority police officer, and an older woman who worked for the Port Authority and was being helped down the stairs by one of the firefighters.

Don’t move!

His first order to the group: *Don’t move*. Any sudden movement could shift the debris and send them all out of the air pocket they were in. He called above and below to other survivors asking if anyone saw a way out. No one did. Then he got on his radio, and about an hour and half later managed to reach a fellow fire chief who was on his way in to help. He told his friend he was trapped in the North Tower. His friend replied, “You can’t be there. There is no North Tower.” At that point, no one could even tell where the North Tower had been because the debris field was so huge and far flung. Picciotto assured his friend he was there, and the chief said they’d do everything they could to find him and his fellow survivors.

Picciotto tried turning on the bullhorn siren, but no one could hear it. Several hours later he was exhausted and lethargic. He decided to lie down and get a little rest, and as he did he looked up and miraculously saw a patch of dark grey. He called out to those trapped above him to see if anyone else saw it too, and they did. What’s more, it kept getting brighter and brighter as the minutes went by. It turns out the dust was settling and smoke dispersing. The small gap that had been there all along was now visible because a little light was getting through.

Another hour went by, and still there was no sign of rescue. Picciotto decided to take a risk and climb up to

the light to see what was there. “I didn’t want to cause a secondary collapse, but we’ve been here for hours and have to do something. So I climb up and up — and then I’m out.” He also managed to get others of his small group of survivors out, and then they tried the bullhorn siren again. They got word on the radio that someone heard it, though very faintly. Hours more went by until help finally arrived. Even with help, however, getting out was no easy matter — with fires still all around, they couldn’t go out the way the rescuers came in. “We kind of had to meander and move and finally worked our way out,” he says.

As soon as he reached safety, he went to the chief in charge and told him others were still trapped in the debris and needed to be rescued. Then they put him in the ambulance and he was off to St. Vincent’s.

There when needed

Picciotto said his sight was damaged by the ordeal, as was his hearing. While his sight came back fairly quickly, the hearing took longer to recover. What didn’t recover, however, is his lungs. “In the fire department we get pulmonary function tests,” he explained. “I was very active, doing cardio every day, but my pulmonary function tests started going lower and lower to the point where I can’t do a tenth of what I used to be able to do.”

He said the doctors and respiratory therapists who took care of him have helped. “If it wasn’t for you, I don’t know where I would be now,” he told the crowd at the Closing Ceremony. He said he still has the “World Trade Center cough,” as do many other first responders who worked at Ground Zero. He’s been in two separate lung function studies, with many of the follow-ups conducted by respiratory therapists. “So I just want to say thank you, for what you did for me and what you did for all the firemen down there,” he said. “We’re all realizing how much damage was done to our lungs.”

Picciotto also took a moment to thank all the respiratory therapists and other medical professionals who rushed to the hospitals the day of the attacks. “Everyone was volunteering to help,” he said. “The only thing they didn’t have was many victims. But the thing was, people like yourselves were volunteering, they were there when they were needed.” ■



RC Currents

IN THE NEWS

Some Kids with Asthma May Need Alternative Treatment



Researchers led by an investigator from Henry Ford Health System have identified a group of children with asthma who may require an approach to treatment that's not currently outlined in national asthma guidelines.

The study analyzed data collected from 717 children ages 6 to 17 at birth and every two months thereafter for one year. Using a computer "clustering" program, five separate groups were identified, distinguished mostly by asthma severity, presence of allergy, associated nasal symptoms, and lung function test abnormalities. One group experienced few allergies but suffered from frequent asthma symptoms despite receiving high doses

of preventative medicine. In the other four groups, increasingly difficult to control asthma was associated with higher numbers of allergies.

"More study is needed to determine appropriate interventions tailored to this group of children," Edward Zoratti, MD, division head of allergy and immunology at Henry Ford Health System was quoted as saying. "It may represent a gap in our understanding of asthma among children experiencing a particular type of the disease." The study was published in a recent edition of the *Journal of Allergy and Clinical Immunology*. ■

RTs Go All Out for RC Week 2016

**RESPIRATORY THERAPISTS
REAL LIFE HEROES**



Rock Valley College Students for Better Breathing Club

PARC Week Proclamation 2016

Adopted, October 26, 2016

THE STATE OF PENNSYLVANIA BILL TEXT » PENNSYLVANIA 2016TH GENERAL ASSEMBLY - 2015-16 REGULAR SESSION » HOUSE RESOLUTION 1101

A RESOLUTION

Designating the week of October 23 through 29, 2016, as "Respiratory Care Week" in Pennsylvania and commending respiratory therapists for their outstanding contributions to health care.

WHEREAS, "National Respiratory Care Week" is observed October 23 through 29, 2016, nationwide; and

WHEREAS, This observance celebrates the contribution that respiratory therapists make to our nation's health care system; and

WHEREAS, Respiratory therapists are the only allied health practitioners specifically trained to assist physicians in the care of respiratory patients; and

WHEREAS, Across Pennsylvania, respiratory therapists assist with diagnostic procedures, administer oxygen and breathing treatments, conduct pulmonary therapy, teach home care to patients and family members and provide acute care for patients on ventilators; therefore be it

RESOLVED, That the House of Representatives designate the week of October 23 through 29, 2016, as "Respiratory Care Week" in Pennsylvania; and be it further

RESOLVED, That the House of Representatives commend all respiratory therapists for their outstanding contributions to health care.

History

THE GENERAL ASSEMBLY OF PENNSYLVANIA HOUSE RESOLUTION NO. 1101 SESSION OF 2016

INTRODUCED BY ADOLPH, OCTOBER 24, 2016

Sponsor(s)

Adolph

Pennsylvania Proclamation

Transitions

In the lives of AARC members



Jack Higgins, RRT, lost his battle with brain cancer in October. A long-time AARC member, he will be remembered for mentoring young respiratory therapists in the profession and for founding the Camden Drug Company in the 1980s. He went on to work for Apria Healthcare after selling the company to them. His most recent position was at Waldo County General Hospital in Belfast, ME.



Betty Fisher, MEd, RRT, CPFT, passed away in November. An AARC member since 1976, she served the Oklahoma Society for Respiratory Care in many capacities. Fisher was instrumental in helping achieve licensure for respiratory therapists in the state, and she was a member of the AARC House of Delegates. Fisher also served her country as a member of the Air Force during the Vietnam War. She worked at several hospitals in Oklahoma during her career; her final position was at Francis Tuttle Technology Center in Oklahoma City, where she served as a respiratory care instructor. ■

Contribute to Our “Transitions” Column

The AARC “Transitions” column is devoted to sharing news about the passing of AARC members.

You can submit news about your colleagues’ recent passing by going to <http://c.AARC.org/transitions>. Please provide any information about the member’s recent obituary so that we can share it with the membership and pay tribute. ■

New Members

Welcome to the AARCI



Look Who Just Became an AARC Member!


Our monthly “New Members” list can be accessed at http://c.AARC.org/new_members. Current AARC members are encouraged to check this site on the first of each month to view the names of individuals who have been approved as “Active Members” of the Association. ■



Hillsdale Hospital



University of South Alabama



Students and Seniors Get Price Breaks on Dues

AARC members who are just starting out in their careers and those who are getting ready to wrap things up can both benefit from exclusive membership offers developed just for them.

The transitional student membership is available to student members who are preparing to graduate. Those who renew their membership at least 91 days prior to graduation will save the most on dues, but savings are available up to 150 days past graduation. AARC student members nearing graduation should look for an email with specific instructions on how to claim this special membership price break or call AARC Customer Service at (972) 243-2272 to participate.

Members age 65 and older who have been AARC members for at least 20 years are eligible to maintain their membership in the Association for just \$25 per year. Alternatively, they can pay \$200 and become members for life. This digital membership gives these loyal members the chance to stay in touch with everything going on in the respiratory care industry while they're planning for or entering retirement. Members eligible for this senior status can call AARC Customer Service at (972) 243-2272 to learn more about these membership options. ■

Gene Therapy for CF Moves Forward



University of Iowa researchers believe gene therapy may be a viable approach for treating or preventing lung disease caused by cystic fibrosis (CF). In two studies conducted in pigs, the investigators identified two different virus-based vectors that can restore a working version of the faulty CF transmembrane conductance regulator (CFTR) protein to the airway cells. Important aspects of lung biology were normalized, and the treatment also improved the ability of airway secretions to kill bacteria.

“This is an important proof of principle for the idea that gene therapy for CF could work because we used an animal model that we know develops lung disease like people,” Paul McCray, Jr., who authored one of the studies, was quoted as saying. The studies were published in *JCI Insight* last fall. ■



El Camino Hospital



Modesto Junior College



Washington, DC Proclamation

Share Your Wisdom in Our Reflections Column

AARC members who have recently retired from the profession have been writing about their careers in the *AARC Times* column called "Reflections." We invite submissions in which you would share special

things that happened in your career, what they meant to you, and why. Funny, sad, inspiring — the door is wide open! So start brainstorming some ideas and then submit your story to *AARC Times* Editor Marsha Cathcart at cathcart@aacr.org.

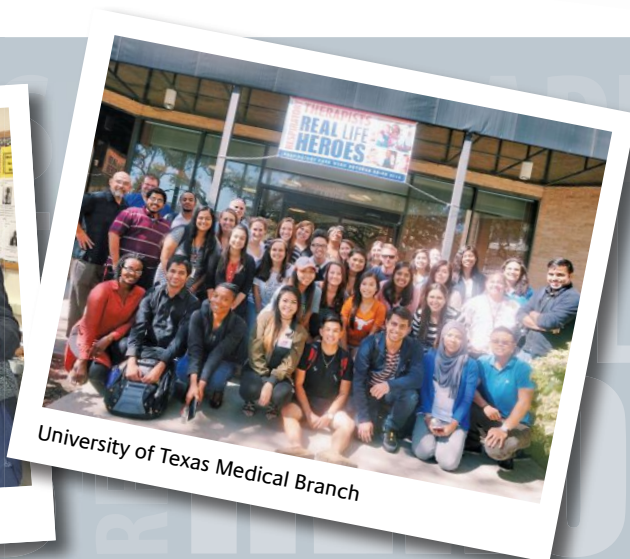
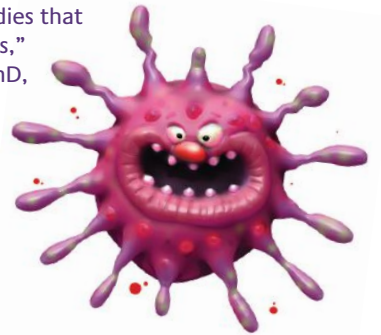


For Flu Viruses, It's Location, Location, Location

U.S. and Canadian investigators believe they are one step closer to creating a universal flu vaccine. Their latest findings, published in the *Proceedings of the National Academy of Science USA*, build upon their earlier discovery of a class of antibodies capable of neutralizing the most dangerous types of influenza viruses.

The new research zeroes in on exactly where those antibodies need to be placed.

"Our findings show that just having antibodies isn't enough. You have to have antibodies that bind to very specific places on the virus," noted senior author Matthew Miller, PhD, from McMaster University. "Now that we know the places where antibodies have to bind, we can modify our vaccines so that we generate those antibodies in higher numbers." ■



Higher Indoor Temperatures Can Worsen COPD

Researchers publishing in the *Annals of the American Thoracic Society* have found that rising indoor temperatures can worsen chronic obstructive pulmonary disease (COPD) symptoms, especially in cases where indoor air pollution is also high.

The study involved COPD patients who completed a daily questionnaire that included the Breathlessness, Cough, and Sputum Scale. Participants also performed daily spirometry to assess their lung function and recorded their use of rescue inhalers to manage symptoms. Two air pollutants, fine particulate matter and nitrogen dioxide, were also measured, and outdoor temperatures were tracked as well.

“Previous studies have found that the elderly are particularly vulnerable to the effect of heat and more likely to die or be hospitalized during heat waves,” according to study author Meredith C. McCormack, MD, MHS. “To our knowledge, this is the first study to report an interactive effect between indoor temperature and indoor air pollution in COPD.” ■



Unraveling Nicotine Addiction in the Brain

Researchers from University of Texas Southwestern Medical Center have crystallized a protein they believe holds answers to how nicotine addiction occurs in the brain. The protein, called the alpha-4-beta-2 nicotinic receptor, sits on nerve cells in the brain. Nicotine binds to the receptor when someone smokes a cigarette or chews tobacco, causing the protein to open a path for ions to enter the cell.

The process produces cognitive benefits such as increased memory and focus but is also highly addictive. The investigators hope that the three-dimensional structures they created will help other researchers understand how nicotine influences the activity of the receptor and lead to a medication that mimics its actions in the brain. The study was published in a recent edition of *Nature*. ■



We all agree that patients deserve respect and dignity, but defining these terms is easier said than done. Johns Hopkins researchers are taking a stab at it via their new ten-point checklist to assess key components of respect and dignity in the ICU.

The checklist is based on data derived from the direct observation of 351 clinical encounters with 184 patients in seven ICUs within the Johns Hopkins Health System. The assessment of respect and dignity is broken down into ten items within two general domains: clinician behavior, such as greeting patients, explaining activities, and being responsive to patient needs and requests; and clinician



demeanor, like being pleasant, compassionate, and supportive.

Statistically significant differences in mean checklist scores were seen between different types of ICUs, which the authors say could indicate that units caring for only one type of medical problem — for example, neurological ICUs — do a better job of offering their patients respect and dignity than general units that care for “all comers.” Staff training,

expertise, or familiarity with the patients’ conditions could be coming into play. The study was published in *Critical Care Medicine* last fall. ■

Study Looks at Respect and Dignity in the ICU

Serum Cotinine Predicts Years of Life Lost

Measuring levels of serum cotinine can predict lost years of life among nonsmokers, according to a study involving 20,175 nonsmokers. After adjustment for sex, education, race/ethnicity, body mass index, and smoking habits, the analysis showed a significant increase in years of life lost (YLL) across cotinine concentrations. In the adjusted analysis, the lowest

quartile of cotinine concentration was associated with 5.6 YLL, while the highest quartile was linked to 7.5 YLL.

Many of the people who were at risk for YLL did not even know they had been exposed to secondhand smoke. The study was published in *Carcinogenesis* last fall. ■



Sheikh Khalifa Medical City



Bon Secours Saint Francis Eastside Hospital

Progesterone May Repair Flu-Induced Lung Damage



Progesterone may help repair lung injury caused by influenza, report Johns Hopkins researchers who examined whether levels of progesterone that mimic physiological concentrations present after ovulation (and equivalent to levels used in contraceptives) influence the host response to influenza infection.

The study was conducted in female mice whose ovaries had been removed and whose progesterone was supplied by implanted pellets that kept hormone levels constant. While progesterone did not reduce the level of virus present in the mice, it did decrease the amount of inflammation and tissue damage in the lungs and promote faster recovery from the infection. The study appeared in a recent issue of *PLOS Pathogens*. ■

Food-Borne Toxins on Food Implicated in Lung Problems

Could toxins found on nuts or corn be causing respiratory problems or making them worse? Yes, according to investigators publishing recently in *Nature Scientific Reports*.

The University of Pennsylvania researchers explain that 25% of the world's food crops are contaminated with these molds, known as aflatoxins, although exposure often occurs through contaminated dust inhaled during food processing. They are known to cause allergic fungal rhinosinusitis and bronchopulmonary aspergillosis, but the downstream effect on the airway passage is less studied and understood.

In laboratory imaging experiments with human upper airway cells, the researchers showed that acute exposure to aflatoxins slowed down and impaired key defense mechanisms in the airways, including mucosal ciliary clearance and ciliary beat frequency (CBF), suggesting that aflatoxins enhance the pathogenicity of the fungi and possibly other co-infecting pathogens such as bacteria.

Good news: CBF reductions were blocked by the protein kinase C inhibitors Gö6983 and calphostin C. This led the investigators to conclude that drugs with similar activity could potentially be used to treat the fungal infection and prevent further co-infections. The use of such drugs to treat the infections may lessen the need for patients — as well as livestock and pets — to be on antibiotics. ■



ARDS Patients Continue To Decline



Total recovery from the acute respiratory distress syndrome (ARDS) may be even more elusive than clinicians think. A new study conducted by investigators from Johns Hopkins finds the majority of patients who are discharged from the hospital after a bout of the condition experience ongoing declines in health over the next five years.

The study participants were recruited from 13 intensive care units (ICUs) in four hospitals in Baltimore, MD. Each participant completed at least one physical status assessment three or six months after ARDS and then annual assessments for five consecutive years. Three measures of physical status — muscle strength, exercise capacity, and self-reported physical functioning — were evaluated to determine whether physical status improved, declined, or remained the same.

When those who died during follow-up were included in the analysis, 86% experienced a physical decline in at least one measure. When those who

died were excluded, 69% experienced a physical decline, with age as the key risk factor for decline in each of the three physical measures. Preexisting medical conditions were a risk factor for decline in muscle strength and exercise capacity.

“These findings have helped us determine that older survivors and those who enter the ICU with other preexisting illnesses have the highest risk of physical decline, and support future efforts to design and evaluate post-ICU rehabilitation specifically targeting these types of patients,” study author Dale Needham, MD, PhD, was quoted as saying.

The study was published in a recent edition of *Intensive Care Medicine*. ■



Metroplex Health System



King Faisal Specialist Hospital & Research Center

Strange But True...

Hamilton knows best: Doctors and other staff in a Chicago clinic capitalized on the hit Broadway musical *Hamilton* last fall to produce an entertaining *YouTube* video to encourage people to come in for their flu shot. Search for it to see these health care providers rap their way through the “10 Flu Commandments.”



Good nicotine: Researchers from Texas A&M College of Medicine believe nicotine might help ward off diseases of aging like Parkinson's disease or Alzheimer's disease. The beneficial effect is linked to nicotine's natural ability to suppress the appetite.



Nursebots: Robotic nurses are all the rage in Japan, reports *Hospitals & Health Networks*. The lifelike machines follow human nurses around, recording specific patient data, and they can also remind patients of upcoming appointments or to take their medicine. They can even keep a patient company!



Hambones, one and all: Several hapless pets who suffered from respiratory problems were among the heralded nominees for this year's Hambone Award, an honor bestowed by Nationwide® on the pet causing the most unusual pet insurance claim of the year. Freckles the cocker spaniel passed out from oxygen deprivation when she got her head stuck in a potato chip bag. Mitten the cat and Sasha the poodle (and their entire family!) suffered carbon monoxide poisoning after a detector failed in their home. Thunder the giant schnauzer ended up breathless after ingesting the contents of an asthma inhaler. ■



RWJBarnabas Health



DCH Health System-RMC & NMC Campuses



Industry Watch

Researchers receive grant for asthma management project

A team of researchers led by Richard Slatcher, PhD, associate professor of psychology at Wayne State University, has been awarded \$2.74 million from the NHLBI for a project that aims to improve asthma management in youth. The program, Asthma in the Lives of Family Today, will identify the behavioral and biological pathways through which family social environments impact youth asthma. "This is a unique opportunity to understand the effects of family functioning on childhood disease over time in a large sample of urban youth," noted Dr. Slatcher. "Our novel approach will incorporate the Electronically Activated Recorder, an easy-to-use recording device that provides a non-obtrusive record of daily behavior as well as surveys, daily diaries, biological measures, and clinical asthma evaluations."

Fisher & Paykel reports JAMA study results

According to Fisher & Paykel Healthcare, results from a study published in *JAMA* show

that, among high-risk adults who had undergone extubation, nasal high-flow (NHF) therapy was not inferior to non-invasive ventilation (NIV) for preventing reintubation and post-extubation respiratory failure. The multicenter randomized non-inferiority clinical trial involved 604 adults in three ICUs in Spain. The proportion of patients requiring reintubation was 22.8% with NHF therapy vs. 19.1% with NIV. Post-extubation respiratory failure was observed in 26.9% of patients with NHF vs. 39.8% of patients with NIV. Median time to reintubation was not significantly different in the two groups, but median ICU length of stay after randomization was lower in the NHF group, 3 days vs. 4 days. Adverse effects requiring withdrawal of therapy were seen in 42.9% of the NIV group vs. none in the NHF group.

BD, Apax launch new company

BD (Becton, Dickinson and Company) and Apax Partners have launched a joint venture called Vyaire Medical that will serve as a standalone global respiratory solutions company. Vyaire

Medical includes all business lines within BD's respiratory solutions business, including ventilation, respiratory diagnostics, vital signs, and AirLife. It is expected to have an estimated annual revenue of over \$800 million. BD will retain a 49.9% minority interest in the new company.

NHLBI grant goes to Ohio investigator

In the first major study of its kind, principal investigator Benjamin Gaston, MD, a pediatric pulmonologist and researcher at Case Western Reserve University School of Medicine and University Hospitals Rainbow Babies & Children's Hospital, has received a five-year, \$13.3 million federal grant to develop optimized, personalized combinations of medications tailored to the unique needs of children with cystic fibrosis and severe asthma. Under the NHLBI grant, Dr. Gaston and his colleagues will conduct highly specific lung function testing and laboratory analyses to identify patients most likely to respond to certain therapies.

ResMed receives leadership award from Frost & Sullivan

Based on its recent analysis of the sleep tracking solutions market, Frost & Sullivan has recognized ResMed with the 2016 North American Product Leadership Award for sleep tracking solutions. Frost & Sullivan believes the S+ by ResMed is the most advanced sleep tracking solution available to consumers today and the only non-contact solution. Each year, Frost & Sullivan presents this award to the company that has developed a product with innovative features and functionality. The award recognizes the quality of the solution and the customer value enhancements it enables.

Chiesi USA, Digestive Care announce FDA approval

According to Digestive Care, Inc., and its marketing partner in the United States, Chiesi USA, Inc., the U.S. Food and Drug Administration (FDA) has approved an infant-specific dose of PERTZYE® (pancrelipase) in a 4,000 USP lipase units capsule. The new capsule strength will enable guideline-recommended dosing

and administration of PERTZYE for infants up to 12 months old with exocrine pancreatic insufficiency due to cystic fibrosis (CF) or other conditions. Alan Roberts, senior vice president of scientific affairs at Chiesi USA, says, "We continue to work to expand treatment options in order to fill unmet needs, and our partnership with Digestive Care, Inc., is one of the ways that we bring innovative solutions to CF patients."

"LAMposium" zeroes in on rare lung diseases

The LAM Foundation hosted its annual LAMposium conference in conjunction with the 2016 International Rare Lung Diseases Research Consortium, the largest rare lung diseases conference of its kind, in Northern Kentucky last September. More than 450 scientists and patients representing some 20 countries attended the conference, which offered a forum to educate patients, jump start clinical trials, and introduce the latest research on rare lung diseases.

BI, Ashfield Healthcare offer patient support program

Boehringer Ingelheim Pharmaceuticals, Inc. (BI), and Ashfield Healthcare, a global provider of health care services, have launched a new patient support program, "STIOLTO Promise," designed to

provide free medicine and resources to people who have been prescribed STIOLTO RESPIMAT to treat COPD. BI wants to provide this new line-up of resources and services for people beginning treatment for COPD with STIOLTO RESPIMAT. The program has already enrolled 1,000 participants.

New York researcher studying pediatric OSAS

Raanan Arens, MD, from Children's Hospital at Montefiore and Albert Einstein College of Medicine, has been awarded a \$3.7 million grant from the National Institutes of Health to study and develop tools for combatting obstructive sleep apnea syndrome (OSAS) in children. Dr. Arens will lead a team of investigators from different institutions and fields, including pediatricians, radiologists, image processing and analysis experts, and biomechanical engineers. Together they will build a computer simulation model of the upper respiratory tract and surrounding tissues to better understand the causes of OSAS and discover ways to improve children's health outcomes.

Quidel gets 510(k) clearance for influenza assay

Quidel Corporation has received 510(k) clearance from the U.S. FDA to market its Solana® Influenza A+B

assay for the detection of nucleic acids isolated from nasal and nasopharyngeal swabs from patients with signs and symptoms of respiratory infection to aid in the diagnosis of influenza A and B infections. The Solana® Influenza A+B Assay is intended for use only with the Solana® instrument. "A single Solana instrument system performs up to 12 Solana Influenza A+B assays on almost any sample type or brand of viral transport media in under an hour, and up to 96 patient samples during an 8-hour shift," Douglas Bryant, president and CEO of Quidel Corporation was quoted as saying.

Corbus Pharmaceuticals announces early results on Resunab

Corbus Pharmaceuticals Holdings, Inc., presented data on the effects of Resunab in a model of inflammation in healthy volunteers at the 6th European Workshop on Lipid Mediators. Both doses tested inhibited neutrophil infiltration by approximately 70% and decreased microvascular blood flow around the site of inflammation at 4 hours post-stimulus. According to Resunab, the investigators also found that the drug progressively increased microvascular flow around the site of inflammation during the early phases of resolution (10–24 hours post-stimulus), an event believed to drive an efficient acute inflammatory response

and signal its timely resolution.


Community Health Charities focuses on leading causes of death

Community Health Charities has launched the Drive for a Cure fund to address some of the leading causes of death in the United States, including heart disease, cancer, respiratory issues, stroke, Alzheimer's, and diabetes. "Approximately 77% of Americans suffer from at least one long-term health challenge," says Tom Bognanno, president and CEO. "These chronic diseases impact overall health and wellness, exacerbate mental health issues, and increase health care costs. That's why we brought together some of the top nonprofits working on these issues to focus on research and preventative care." The Drive for a Cure fund supports leading charitable organizations including the Alzheimer's Association, American Lung Association, Cancer Research Institute, Children's Heart Foundation, City of Hope, JDRF International, National Kidney Foundation, and National Stroke Association. ■

Brief submissions and photos for this column may be sent to AARC Times Editor Marsha Cathcart at cathcart@aacrc.org.


Industry Update

Featuring information on products and equipment from manufacturers




Safely ventilate babies in the
MRI

The pNeuton™ mini infant transport ventilator with nCPAP is MRI compatible to 3 T.




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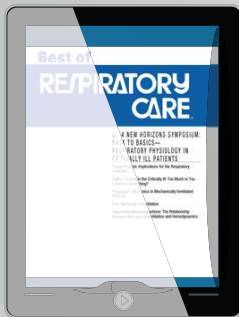
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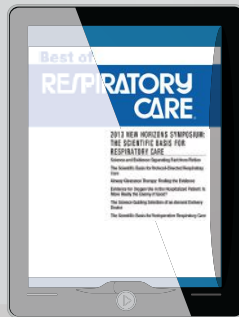
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Calendar of Events

AARC & State Society Programs

February 9-10

Daytona Beach, FL

Sunshine Seminar & Annual State Meeting

Contact: fsrc@fsrc.org, or (866)-534-6172

April 9-11

Auburn, WA

44th Annual Pacific Northwest Regional Respiratory Care Conference and Scientific Assembly

Contact: jon.jahns@virginiamason.org, or (206) 583-6458

Submissions for the next available issue are due December 22.

For information on submitting calendar events, contact: Timothy Myers, AARC Times 9425 N. MacArthur Blvd, Suite 100, Irving, TX 75063-4706 (972) 358-0018 Fax (972) 484-2720 E-mail myers@aarc.org

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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.

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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.
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PULMONARY TECHNOLOGIST

East Meadow, Long Island NY. With a strong commitment to raising the bar for healthcare in our community, **Nassau University Medical Center** is a Level I Trauma Center and a 530-bed teaching hospital affiliated with Northwell Health (North Shore/LIJ) & Stony Brook University.

We currently seek a full time Pulmonary Technologist to direct technicians in performing measurements on patients, using technical equipment; perform pulmonary function tests & related duties. Under supervision of a physician, you will train, schedule, & supervise technicians in performing & interpreting various pulmonary measurements for application in clinical diagnosis & medical research; and perform & interpret such measurements.

Specifically, you will:

- Perform pulmonary function tests such as spirometry, diffusion, lung volume, methacholine challenge, exercise studies, plethysmography, mask fit, arterial blood gas sampling & 6-minute walk test
- Direct the testing & managing of patients by subordinate personnel
- Inspect equipment to ensure proper operating and calibration levels
- Maintain up-to-date protocols of various pulmonary function tests & procedures under the guidance of a physician in charge
- Train/supervise technicians

We require:

- Graduation from High School
- 6 yrs of satisfactory exp in pulmonary technology
- Certification as a Pulmonary Function Technologist by the National Board for Respiratory Care

Must possess considerable knowledge of human physiology; bio-chemical laboratory techniques; and fundamental mathematics. Must have skill in use of complex mechanical and electronic laboratory equipment.

Email Resume to: Careers@numc.edu

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Forty-Five Years of Figuring Patients Out

John Goodman, BSRT, RRT, FAARC

In December of 1967, I received a letter that read, "Greetings from the office of the President of the United States." Shortly thereafter, I found myself at Fort Jackson, SC, taking the eight-week course to become a combat medic.

For reasons I would never figure out, the U.S. Army sent me for advanced training as an operating room technician instead of the infantry. Working as a scrub technician enabled me to assist on some massive chest wound surgeries and develop a true love for pulmonary medicine.

As I got close to finishing my time in the Army, a chest surgeon told me about a program at State University of New York at Stony Brook that was accepting its first class into a baccalaureate program in inhalation therapy. With his letter of recommendation (and a few others), I found myself in a new program that would ultimately lead to a bachelor's degree in respiratory therapy (RT) and cardiopulmonary technology. Two weeks after graduation, I moved to Denver, CO, trying to bring a little piece of Stony Brook to the Rocky Mountain West.

Exponential changes

Recent grads may find it amusing I still have that first pay stub. With (I believe) the only degree in RT west of the Mississippi, and having passed both the written and oral exams, I was now RRT #2284. With this background, I was paid \$2.64/hour! That is certainly one thing that has changed over the past 45 years! Like the Wright brothers, we've come a very long way. Their first flight in 1903 averaged 6.8 mph. Forty-five years later, the air speed record was

670.01 mph. The fastest speed recorded on land in 1903 was 91.0 mph; in 1948, it was 394.8 mph. I hope you can see my point.

In the 45 years I have spent in respiratory therapy, I have seen us go from using just two commercially available volume ventilators to ventilators with artificial intelligence capabilities designed into the software. I have been witness to the evolution of our unique profession.

One quick example might be helpful here. In 1972, just after moving to Denver, I worked at a very good community hospital. One day, I received a stat page to check out a problem with a leaking flow meter in a patient's room. It was an easy fix, and as I walked out of the room, the patient asked the nurse who I was. The nurse replied, "Oh, he's just the O₂ boy." At that moment, I decided to become an RT educator.

Sputum Bowl pride

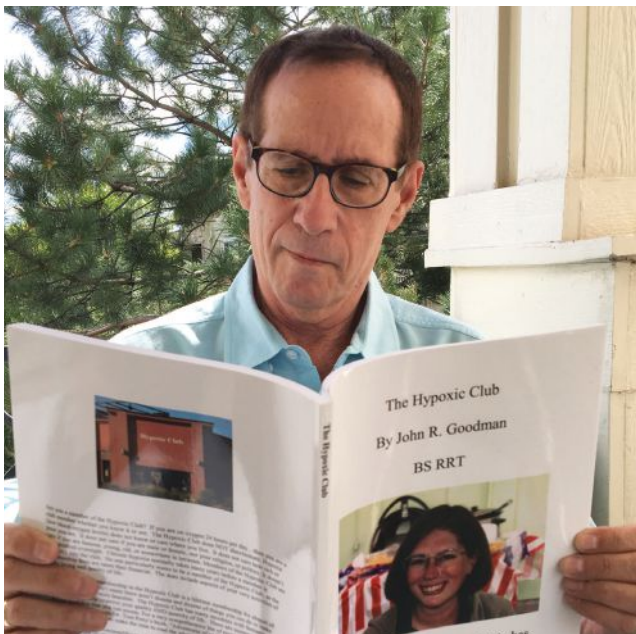
In the early 1970s, hospital-based programs were still very much in evidence, so when the opportunity to begin a respiratory therapy certification program at St. Anthony's Hospital arose, I jumped at the chance. A few months later, a phone call from one of the faculty members at Weber State College in Utah led to an intercollegiate educational competition that, with advice and support from the AARC, morphed into the first National Sputum Bowl Championship held during the 1978 convention in Las Vegas.

Since it has continued to this day as one of the AARC convention highlights, I'd say that this is one contribution to respiratory care for which I am very proud. All those years moderating the Sputum Bowl allowed me to meet and work with some of the best and brightest

about the author...



John Goodman, BSRT, RRT, FAARC, retired from his position as executive vice president of Technical and Professional Services at Transtracheal Systems in Englewood, CO, in June 2016.



John Goodman is looking forward to starting on the second edition of his popular book for patients on home oxygen.


RTs of our profession. I'd need much more time and space to acknowledge them all, but they do know who they are.

A simple pledge

A chance snippet of conversation overheard at another AARC annual meeting led to an offer to work at the Institute for Transtracheal Oxygen Therapy (ITOT). In the early to mid-1980s, this new form of oxygen therapy delivery device was just starting to go through its clinical trials. I began working at ITOT (and later at Transtracheal Systems) in December of 1986.

In June of 2016, I officially retired after more than 30 years of working with transtracheal oxygen therapy. At the time of this writing, I will not yet have been retired 90 days, so it's a bit early to discuss a grandiose retirement plan. I will probably begin work on the second edition of my book, "The Hypoxic Club," written for my (our) patients on home oxygen.

Recently, I gave my last formal presentation to my Colorado colleagues at the annual state meeting for the Colorado Society for Respiratory Care. Regarding the state of our profession, I came up with a simple pledge that I "left" to the young, soon-to-be RTs in the room. I now leave it to you. "I pledge allegiance . . . to the Profession . . . the Profession known as Respiratory Therapy. And to the patients . . . that we all serve . . . one profession, under medical direction, working together . . . till we get that patient figured out!" ■



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