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Times

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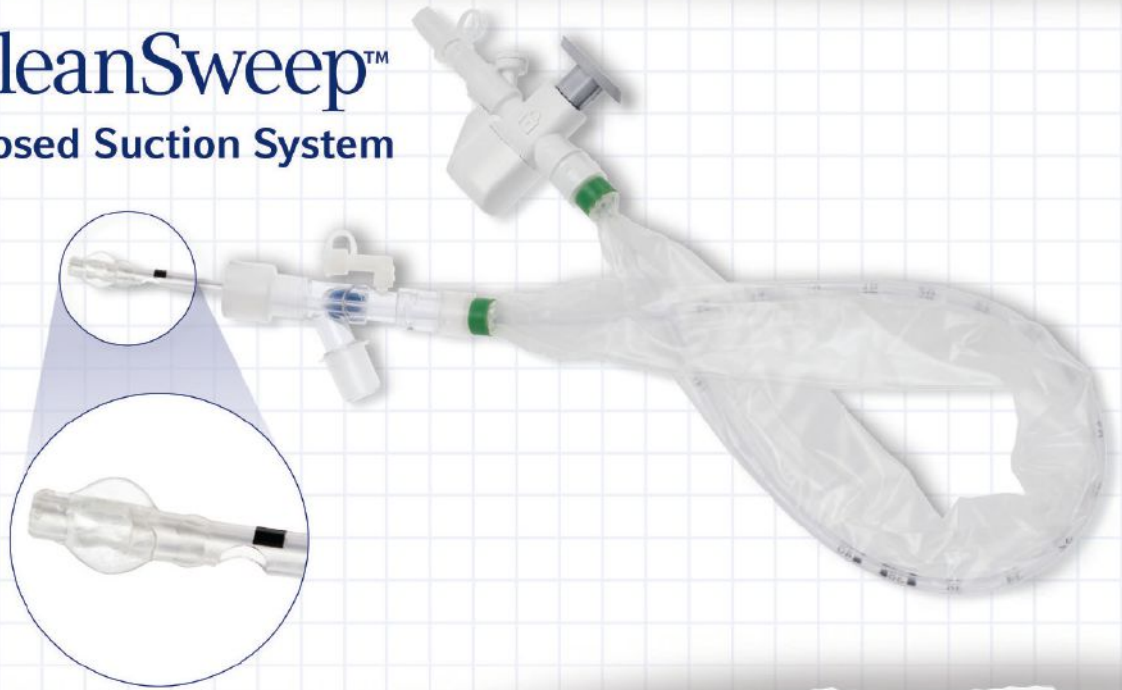


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Cast your vote beginning October 1 to choose the next leaders of the AARC.

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Here’s a preview to some of the lectures at Congress 2018, written by the session presenters. By Debbie Bunch

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AARC Strategic Plan

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

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member_services/mission/](http://www.aarc.org/member_services/mission/).



American Association
for Respiratory Care

Editor

Marsha Cathcart, BA

Managing Editor

Douglas Laher, MBA, RRT, FAARC

Contributors

Debbie Bunch, BA
Sheila Henegar

Manager of Marketing and Production

Jeanette Chawdhury, MBA

Graphic Designers

Joyce Havins
Michelle Plumlee BA
Jennifer Horn

Director of Business Development

Sarah Vaughn, BSRC, RRT

Advertising Rates and Media Information

Contact: phil.ganz@aarc.org
Phil Ganz, 48 Abbey Woods Ln.,
Suite 100, Dallas, TX 75248
Voice (972) 991-4994
Fax (888) 206-9006

Advertising Materials

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

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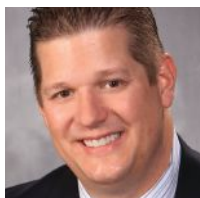
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Publisher

Thomas J. Kallstrom, MBA, RRT,
FAARC

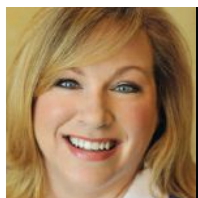
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► Meet the AARC Staff



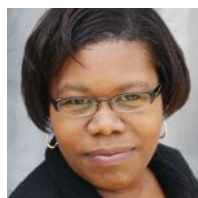
Doug Laher

Associate Executive Director
doug.laher@aarc.org



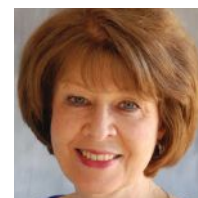
Pam Russell

Exhibits Coordinator
pam.russell@aarc.org



Tina Sawyer

Customer Service Manager
tina.sawyer@aarc.org



Kathy Blackmon

Meetings & Convention
Coordinator
blackmon@aarc.org

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What Does the NBRC *Really* Do with Candidate Comments?

by Lori Tinkler

Are you curious about what happens with the comments that candidates make while taking NBRC examinations? Candidate comments are just one tool that helps ensure NBRC examinations remain fair and reflect current practices. This article explains the candidate comment review process and how comments contribute to examination question revisions.

Candidates may leave a comment about any question on an examination, and there is no limit to the number of comments that may be made. However, the examination timer does not stop while comments are typed, so candidates should be cautious about typing overly long messages, which will leave less time to answer other examination questions.

When a comment is made during an examination, it is instantly logged in the system. Although candidates do not receive feedback in response to comments submitted, be assured that every comment is carefully reviewed by the NBRC Examinations Department three distinct times during the duration of the test form.

The first review occurs one month after a test form has been released. The second review is ongoing and occurs every six months while the test form is in use. The third and final review by the Examinations Department occurs after the test form has been retired from use. After each review phase, comments are also reviewed by NBRC's vice president of examinations.

All comments are available for an NBRC examination committee to review, but only some comments are flagged for the appropriate examination committee to consider. During each phase, reviewers are specifically looking for the following criteria for flagging:

- Question content is causing confusion or ambiguity.
- Insufficient information is provided to select a best response.
- Standard of care regarding the patient's case has recently changed.

To determine whether any of the above potential issues should be considered by an examination committee, NBRC staff members review item statistics (i.e., the number of candidates selecting each possible answer, the number of candidates selecting the right answer and if they passed or failed the examination, etc.) along with each candidate's comment. After this in-depth review process, if a question is brought to the examination committee and is determined to be substantive, the question may be revised before we use it again, or it may be retired from use altogether.

To support the ultimate goal of patient safety, all NBRC examination questions are based on thorough job analyses, researched, and vetted before ever making it to a test form. However, we do rely on candidate comments to

flag questions for review that may be less clear than they should be, that may require more information, or that may have been affected by changes in practice. For those reasons, we expect to use candidate comments as intended: a way to provide meaningful feedback about the content of an examination question to ensure it is fair and reflective of current practice.

The NBRC encourages all candidates and credential holders to visit <https://www.nbrc.org/> for current examination and credentialing news and to view recently posted instructional and informative videos. The NBRC is now on Facebook, Twitter, and LinkedIn. ■



Lori M. Tinkler, MBA, is the NBRC's CEO.



Executive Office Update

Preventing Medical Errors

by Thomas J. Kallstrom, MBA, RRT, FAARC

Did you know that, according to the Leapfrog Hospital Safety Group, hospital medical errors are now the third leading cause of death in the United States?¹ This translates to over 400,000 preventable deaths that occur as a result of a medical error. This is an astonishing fact that every hospital-based respiratory therapist ought to pay close attention to. Have you ever had a close call while providing care to a patient — perhaps a patient on a ventilator or even one that you are providing medicinal aerosol therapy to? If you are honest with yourself, you might recall such a scenario sometime in your career. It has been noted that according to the Institute of Medicine’s Preventing Medication Errors report, the average patient in the hospital is subjected to at least one medical error per day.² We need to do something about this.

So let’s take a look at a likely medication error for which respiratory therapists might be responsible. Inhaled medications and devices are crucial for our patients and are common medication delivery systems that we use for our patients. There is no argument that it is important for us to use the correct technique as we apply each treatment while teaching the patient proper technique at the same time. A recent study looked at the proficiency of health care providers with inhaler technique. The systematic review of errors found that correct technique was found in only 15.5% of the cases. The most common error was not having the patient exhale before inhalation, lack of coordination, and breath hold. The same was found for DPIs.³ Unfortunately, despite our best efforts, this has not improved over the last 40 years.⁴

A patient survey found that with COPD patients, 43% of subjects had ever used a pressurized metered-dose inhaler or DPI; one third of subjects desired more extensive education during office visits; and 25% felt the time

was insufficient to cover questions. Sadly, 15% felt their concerns about COPD treatment(s) were ignored. Subjects believed physicians (32%), nurses (26%), and “no single provider” (28%) were primarily responsible for training and assessing proper inhalation technique.⁵ Although respiratory therapists were not called out in the paper, it certainly cries out the need to have the respiratory therapist front and center in the hospital, home, and clinic when it comes to our proficiency and instruction of our patients.

In a pulmonologist survey regarding inhaled medicine devices, most respondents were confident in their knowledge about treating COPD but many were less confident about the use and maintenance of inhalation devices, and most respondents desired to learn more about inhalation devices.⁶ Again, this brings out the need for the respiratory therapist to teach patients, as well as other clinicians, about aerosol delivery technique.

In 2018, the AARC released the fourth edition of the *Guide to Aerosol Delivery*.⁷

I encourage you to download this essential guide, which is written specifically for the respiratory therapist and includes very useful information. As we all know, there are new medications and delivery technique nuances that often change, thus the need for frequent updates to the guide.

So, as we think about prevention of errors that are in the purview of the respiratory therapist, it is essential that we promote a culture of safety. As a team player, the respiratory therapist, as well as the RT student, should be taught the basic tenants of patient safety. For the student, this should be automatic during the academic education and training. A 2018 paper noted that teaching the culture of safety might be lacking.⁸ The authors found that there were significant differences between respiratory care stu-

about the author...



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

dents, nurses, and nuclear medicine technology students as it pertained to safety competence. Respiratory therapy students were found lacking compared to nursing students and nuclear medicine technology students.

A few years ago, the AARC aligned with the Patient Safety Movement, whose goal is zero preventable patient deaths in the hospital by 2020.⁹ The movement has been gathering steam. I encourage you to look closer at this movement and get your hospital involved, or at the very least, adopt some of the protocols that they call APPS for your practice. Some are specific to airway management, unplanned extubations, and overall creation of a culture of safety. You will likely be hearing more about this from the AARC in the coming years.

Patient safety is a frame of mind and is something we must own, whether it's during the seemingly simple act of giving an aerosol treatment or in managing the critically ill patient on a ventilator. As respiratory therapists, we must take a leadership role in ensuring patient safety. We need to own it now. ■

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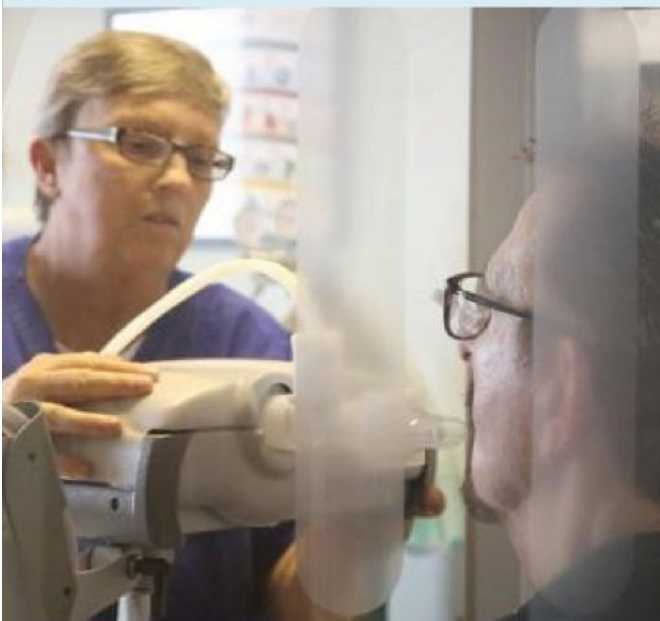
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Commutations and Pardons

by Anthony L. DeWitt, JD, RRT, FAARC

The governor of Colorado recently granted a pardon to a previously convicted felon for the express purpose of making it possible for her to become a respiratory therapist. The governor's act of grace is a quirk of United States law that allows the chief executive of a state or of the federal government to grant a pardon to a person convicted of a felony.

The word "felony" arises from the English borrowing of a French word to denote the kinds of crimes in which a landowner lost possession of his lands. Felonies were considered to be crimes like treason. When the United States borrowed the common law of England for its constitution, the word took on a slightly new meaning: serious crime. Under federal law, a crime for which a person may be sentenced to more than one year in prison is considered a felony (even if the sentence is 90 days in jail). State laws vary, but they are usually more lenient in terms of what is or what is not a felony.

The chief difference between a felony and misdemeanor is that, when convicted of a felony, the felon loses certain rights granted under the Constitution. They can no longer vote. They can no longer serve on juries. In some states, they can no longer execute affidavits. They cannot own guns. They cannot be a locksmith or a gunsmith. And, in many states, they cannot possess a professional license (even in professions like cosmetology).

When an executive officer grants a pardon, he restores full rights of citizenship, but only to the extent that other state laws do not have a nullifying effect. A felon can now vote, serve on a jury, and do anything that

a non-felon could do. But the felony remains a court record, and that felony must be reported on an application for licensure.

A pardon does not necessarily mean that a state will issue a license to the person seeking it, even though the governor may want that result. But it does improve the chances greatly because the gestalt of a pardon is that the crime is forgiven and that the civil disabilities imposed by the law are restored.

Consider the case of Eric Kauk, an applicant for a Florida insurance salesperson license.¹ He had a prior conviction for counterfeiting, and the licensing board turned down his application and permanently barred him from re-applying even though the governor had pardoned him. The state statute said that Kauk could not obtain a license, but he nonetheless prevailed at the court of appeals. The court reasoned that if the licensure statute could be applied irrespective of the governor's power to grant clemency, this would be an unconstitutional infringement of the governor's pardon power.

James Gordon had the same luck in Louisiana, where the state board for nursing refused to grant him an advanced practice RN license in spite of his full pardon. The court held that "a full executive pardon, and the effects

that flow from it, are a matter of grace from the state and a function of the executive branch of government, not subject to limitation or control from the other branches."

Of course, the type of pardon matters. Some states grant automatic pardons that restore voting rights after a certain amount of time, whereas Louisiana grants a

about the author...



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

“first offender pardon” that restores voting rights when the crime is the first offense of the person convicted. Ellen Davis, who had served a sentence for poisoning her husband with arsenic, sought a nursing license and held up her “first offender pardon” as a means to that license.² The court did not, however, overlook the prospective nurse’s earlier experimentation with novel pharmacotherapeutics like arsenic. The court held that her pardon restored her basic citizenship rights but was not a finding of innocence. Her license was denied, in large part because it was automatic and not a full grant of executive clemency.

Other states also deny licenses even when an individual has been pardoned. Seth Stone sought a real estate license in Oklahoma after a state pardon for a variety of serious criminal offenses.³ The court there held that the “effect of the pardon in the applicant’s case was to restore to him his rights of citizenship removing all penalties and legal disabilities. It cannot and does not substitute a good reputation for one that is bad.” In other words, the pardon restored his right to vote but not his reputation. As the court later said, “a pardon implies guilt; it does not obliterate the fact of the commission of the crime, and the conviction thereof; according to the judicial decisions on the question it does not wash out the moral stain; as has been tersely said, it involves forgiveness and not forgetfulness.”

Thus, pardons are at best an expression of the state or federal government’s forgiveness for wrongs done. They are, in fact, an admission of guilt, and a board would be within its rights under state law, and applying state law, to hold that a pardon does not mean that a person is of proper moral character to be a therapist. However, a person denied licensure would have a pretty good argument that the governor’s recognition of good reputation and character should be a fact persuasive to the board, as the board in most states is appointed by the governor.

It is also important to remember that a pardon differs substantially from other forms of clemency. A conditional pardon, which is one that applies only if certain conditions are met, may not be considered a full pardon and may not carry the same weight. Similarly, when a governor commutes a sentence, that is not a pardon — it is simply a termination of the punishment.

In 2007, Scooter Libby, an aide to then Vice President Dick Cheney, was convicted on certain charges related to the unmasking of a CIA agent. Although sentenced to 30 months in prison, Libby received a commuta-

tion from George W. Bush, not a pardon. That meant only that Libby did not go to jail; he still had to pay a fine and remained on probation. Despite not getting a pardon, he was granted permission to practice law again in November of last year, all while maintaining his innocence on the underlying charges. In April of 2018 President Trump granted Mr. Libby a full pardon. Nonetheless, a pardon is not necessarily a requirement for all professional licenses.

Most of us will never need a pardon for a state or federal crime, but they exist to help good people who made a serious mistake reclaim their life. ■

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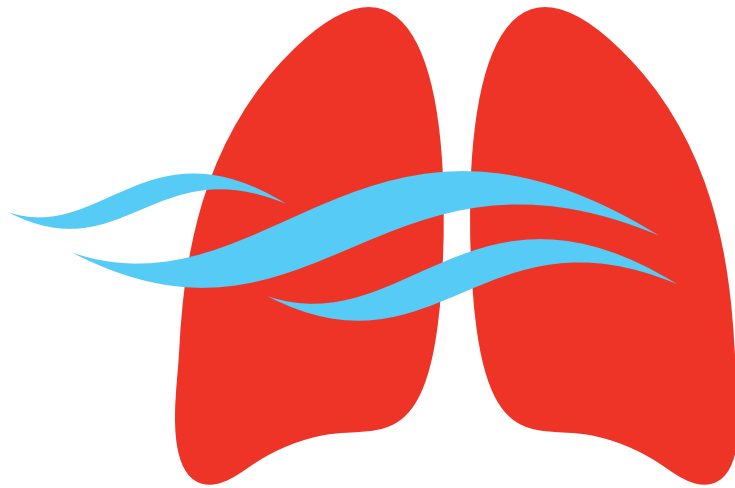
Vote for the Zenith Awards online at www.aarc.org/zenith-award-voting. There you will see the list of companies serving the respiratory care markets. You may vote for up to 10 companies by submitting the online ballot. Online voting will end on October 12, 2018. ■

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Meet the Candidates – Election 2019



All AARC election candidate information is available beginning August 15th of this year at www.aarc.org/aarc-membership/member-services/aarc-election-2019.

If you cannot access the information online, contact the AARC to request a paper ballot: AARC Elections Committee, 9425 N. MacArthur Blvd., Suite 100, Irving, TX 75063-4706, (972) 243-2272. ■

Members of the American Association for Respiratory Care will soon vote for the candidates running for 2019 officer and director positions in the AARC leadership on an online secure website. As an AARC member, you have the important responsibility of choosing individuals to lead the profession and our professional association. All of the candidates are introduced briefly here in *AARC Times*. A biographical sketch about each candidate and their answers to questions posed by the AARC Elections Committee are available for your review online beginning August 15, 2018.

The actual voting website will not be activated until **October 1st**, and voting will continue through **October 31st**.

Be on the lookout for an AARC email containing the unique link to your ballot and the instructions to vote. You can vote only upon receipt of the email, and you will vote using the unique link the AARC has generated to take you directly to your ballot.

AARC active members of record as of **September 30th** of this year will be eligible to vote. Only Active and Life members of each specialty section may vote for the chair of their respective sections.

The secure election website includes your ballot for you to cast your vote for each candidate. Please be sure to read through all the biographical information and questions the candidates have answered online before proceeding to the ballot web page for casting your votes.

Your thoughtful consideration of this information before voting will help ensure the most qualified people will lead your professional association. ■

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Current Topics in Respiratory Care 2018

8 DVD Team Series
for Team Development
and Continuing Education

- **Pulmonary Rehabilitation: The Year in Review**
By Brian W. Carlin MD, MAACVPR
- **Role of the Respiratory Therapist in Tracheostomy Care**
By Dean Hess PhD, RRT, FAARC
- **Severe Asthma Attacks in the ER**
By J. Brady Scott, MSc, RRT, RRT-ACCS, AE-C, FAARC
- **Ventilator Discontinuation: The Evidence Base, Guidelines, and "Best Practice"** *By Neil MacIntyre MD, FAARC*
- **The Use of Noninvasive Ventilation at the End of Life**
By Shawna Strickland PhD, RRT, RRT-NPS, RRT-ACCS, AE-C, FAARC
- **Meeting the Challenge of COPD Care in the US: Access and Potential Solutions** *By MeiLan K. Han MD, MS*
- **Caring for the Mechanically Ventilated Patient: A Patient-Centered Approach** *By Sangeeta Mehta MD, FRCPC*
- **Evaluating the Value of the Respiratory Therapist: Where is the Evidence?** *By Marin Kollef MD*



EARN UP TO 8 CRCE



Learn more about the Current Topics series:
<http://c.aarc.org/go/ct18>



AARC Congress 2018

The 64th International Respiratory
Convention & Exhibition



Advance Program

Mandalay Bay Convention Center • Las Vegas, NV
December 4 – 7, 2018 (Tue–Fri) • AARC.org

Welcome To

Patients Take Center Stage

These are uncertain times for health care. What we thought was set in stone a year ago is now in flux. Keeping up with the ever-changing developments is a challenge, but we have to keep our eye on the ball. Patient care must always come first.

You'll find patients at the center of everything that happens in Las Vegas. They'll be right there in every lecture room as leading experts in respiratory care cover the latest in treatment and technology. They'll be at the forefront of every display in the Exhibit Hall.

They'll be top of mind as respiratory therapists gather in informal networking sessions to share their processes and programs.

Come to AARC Congress 2018 to learn what works for your patients, what doesn't, and how you can contribute to the understanding of respiratory care and all that means for the people who depend on you and your organizations for the breath of life.

Unless specified differently, all Congress events will be held at the
Mandalay Bay Convention Center

The 64th International Respiratory Convention & Exhibition

AARC Congress 2018

On behalf of AARC President Brian K Walsh and the Board of Directors, we invite you to attend the largest respiratory care meeting in the world. At AARC Congress 2018 in Las Vegas, the AARC Specialty Sections and the Program Committee have developed a curriculum that will offer more of everything that matters to you and your patients. You may attend other educational meetings, but none of them offer you all of the following...

- The latest information on Value Based Purchasing and its impact on hospitals, patients and the respiratory therapist.
- The AARC Exhibit Hall where you can learn, see and touch the latest advancements in technology showcasing all manufacturers in the industry...more than 200 exhibitors in total and 8 hours of unopposed exhibit time.
- The result of original research presented by your peers in 14 OPEN FORUMS over the 3½ days.
- All the continuing education credit (CRCE) you need to maintain your state license.
- Programs in all areas of respiratory care: adult critical care, neonatal and pediatric care, home care, continuing care, rehabilitation, diagnostics, transport, management, education, sleep, and long-term care, all presenting the most current and cutting-edge information.

Read through this program and very rapidly you will realize why you must come to Las Vegas and be part of the largest and most comprehensive respiratory care meeting anywhere in the world...AARC Congress 2018.

See you there!

300+ original research projects

140+ speakers

200+ sessions on current respiratory care topics

3½ days of networking and education

3 days of exhibits with all companies in the industry

20+ CRCE credits

Register now and connect to the professional event where everything is about quality respiratory care.

PROGRAM COMMITTEE

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Challenges In Mechanical Ventilation: An Interactive Approach

Monday, December 3, 2018 • Las Vegas, NV

8:00 AM – 4:45 PM (lunch on your own)

Registration Fee: Members – \$120; Non-members – \$155; Senior Member – \$30

DESCRIPTION: This course will provide practical information for clinicians at every level of training and experience and review basic and advanced theories and application of mechanical ventilation. Course faculty will demonstrate common patient-ventilator synchrony problems and their solutions using a real ventilator and a breathing simulator. Attendees will be engaged in learning through audience participation, problem solving, and team-based learning.

Course capacity is limited. Deadline for registration is Tuesday, November 13, 2018 or when the course is full. This course can be applied toward continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

**Robert Chatburn MHHS RRT-NPS
FAARC, Cleveland OH**

**Eduardo Mireles-Cabodevila MD,
Cleveland OH**

Understanding Basic and Advanced Modes of Mechanical Ventilation

8:00 AM – 9:30 AM

This presentation lays the theoretical foundation for understanding how ventilators work and how to identify modes of ventilation. It will cover the 10 Maxims of Mechanical Ventilation and the Taxonomy of Modes.

Selecting and Managing the Best Mode of Ventilation for the Patient

9:45 AM – 11:30 AM

This session will explain how to assess the patient in determining the goals of mechanical ventilation. Course faculty will introduce a rational framework for selecting the best mode of ventilation in order to serve these goals.

How to Recognize Synchrony Problems in Volume Control Modes

1:00 PM – 2:45 PM

We will demonstrate live-action patient-ventilator interaction during volume ventilation using a real ventilator and a breathing simulator. Ventilator graphics will be projected and the audience will participate in both diagnosing synchrony problems and finding solutions by adjusting ventilator settings.

How to Recognize Synchrony Problems in Pressure Control Mode

3:00 PM – 4:45 PM

We will demonstrate live-action patient-ventilator interaction during pressure ventilation using a real ventilator and a breathing simulator. Ventilator graphics will be projected and the audience will participate in both diagnosing synchrony problems and finding solutions by adjusting ventilator settings.



Robert Chatburn



Eduardo Mireles-Cabodevila

Women in Leadership

Monday, December 3, 2018 • Las Vegas, NV

1:00 PM – 5:00 PM

Registration Fee: Members – \$75; Non-members – \$100; Senior Member – \$20

DESCRIPTION: Many women naturally possess effective leadership skills and competencies, including demonstrating communication and social skills, utilizing creativity and innovation, problem solving, demonstrating good judgment, and team leadership. It is important to recognize and represent these leadership qualities and competencies appropriately. This pre-course is designed for both women and men and for both emerging and current leaders. The sessions will encourage the participant to examine strengths, leverage mentorship opportunities, and establish a leadership presence as part of developing or helping others to develop a career path.

Course capacity is limited. Deadline for registration is Tuesday, November 13, 2018 or when the course is full. This course is approved for 3.56 hours of continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

Welcome and Intro

1:00 PM – 1:15 PM

The Value of Self-Assessment

1:15 PM – 2:10 PM

Cheryl Hoerr MBA RRT, Rolla MO

It is important for leaders, and emerging leaders, to assess and understand the value their strengths and abilities have on the growth and success of their department, division, and organization. This session focuses on understanding how your personality type can impact your supervisory performance and how to leverage your unique leadership strengths to become a more effective leader.

Mentoring 101: Finding the Right Fit

2:20 PM – 3:15 PM

**Ellen Becker PhD RRT RRT-NPS
FAARC, Chicago IL**

Mentoring relationships have powerful and positive personal, academic, and professional effects. Mentoring

facilitates personal growth and development as well as social and economic opportunity. This session focuses on methods for identifying mentors and leveraging lessons learned, as well as describes how to become an effective mentor.

Developing a Leadership Presence

3:25 PM – 4:20 PM

**Teresa Volsko MBA MHHS RRT
FAARC, Akron OH**

Effective leaders develop awareness of how their words, personal appearance, and actions impact others. This session presents the elements essential to achieving and maintaining a leadership presence. Participants will be introduced to, and have the opportunity to practice, behaviors and techniques which will enable them to command a presence that will empower others to excel.

Panel Discussion

4:25 PM – 5:00 PM



Cheryl Hoerr



Ellen Becker



Teresa Volsko

Industry-Sponsored Pre-Course

Ultrasound-Guided And Emergent Vascular Access Simulation Workshop

Monday, December 3, 2018 • Las Vegas, NV

8:00 AM – 12:00 PM

Registration Fee: Members – \$75; Non-members – \$100;
Senior Member – \$20

DESCRIPTION: This 4-hour workshop will include both didactic and hands-on simulation training for beginner and advanced respiratory therapists. The ideal attendee is on a vascular access team, rapid response team, or seeking the knowledge and skill to develop a team. The simulation training will include ultrasound assessment, needling techniques with the use of ultrasound, and arterial, venous, and intraosseous device insertion. Attendees will rotate through hands-on stations to gain awareness and procedural confidence.

Course capacity is limited. Deadline for registration is Tuesday, November 13, 2018 or when the course is full. This course can be applied toward continuing education credits (CRCE). You must attend the entire course to receive CRCE credit; no partial credit will be awarded.

DISCLAIMER: This industry-sponsored pre-course is brought to you by Teleflex. The sponsoring company is responsible for all topics, faculty and content disseminated during the event. Any information presented, including clinical statements or opinions made by course faculty should not be perceived as being supported by the AARC. Course registration is being rendered by the AARC on the behalf of Teleflex as a sponsorship benefit.

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Tuesday



Opening Session

8:00 AM – 10:30 AM

Awards Ceremony

8:00 AM – 9:30 AM

Thomas J Kallstrom MBA RRT FAARC
AARC Executive Director | CEO | Presiding

This ceremony recognizes the "doers" in the profession, from students to long-established practitioners. Be there and applaud your peers. Today it's them; tomorrow it could be you!

Keynote Address:

9:35 AM – 10:25 AM



Healthcare Remixed
Zubin Damania MD
aka ZDoggMD

Content Category: MGT

Through an engaging mix of song, humor, and creative storytelling, Dr. Damania examines the challenges of delivering compassionate care in our dysfunctional healthcare system while proposing collaborative ways to revitalize it. He explores how we might work individually and collectively to ensure that the future of medicine is a bright one.

Sputum Bowl Preliminaries

Sponsored by

Medtronic

Further, Together

8:00 AM – 6:00 PM

Renee Wunderley BS RRT RRT-NPS /
Presiding

Student teams from the AARC State Societies compete in the preliminary competitions. The top four teams will face off in the Finals on Thursday, December 6.

AARC Congress 2018

Tuesday, December 4

Opening of the Exhibit Hall 10:30 AM

Brian Walsh PhD RRT RRT-NPS FAARC
AARC President / *Presiding*

Karen Schell DHSc RRT RRT-NPS RPFT
AARC President-elect / *Presiding*

The 2018 AARC President and President-elect open the Exhibit Hall. As the gold standard of all respiratory care meetings, AARC Congress 2018 presents to you all the manufacturers and suppliers in the industry. The Exhibit Hall offers attendees an opportunity to see, touch, and manipulate the latest technology in the field and have clinical conversations with manufacturer representatives. Don't miss this great opportunity!

Orientation for First-Time Attendees

11:00 AM – 12:00 PM

Karen Schell DHSc RRT RRT-NPS RPFT,
Frankfort KS

Thomas Lamphere RRT RPFT FAARC,
Sellersville PA

Are you a first-time attendee with unanswered questions about who to see, where to go, and what to expect from your first AARC Congress? If so, then attendance at this presentation is a MUST for you! This presentation provides first-time attendees with an overview of the entire AARC Congress and includes suggestions on how to maximize your time, not only at the educational sessions but also at the exhibits and peripheral activities as well.

Presenting an OPEN FORUM® Abstract

12:05 PM – 12:35 PM

Teresa Volsko MBA RRT FAARC,
Canfield OH

Rich Branson MS RRT FAARC,
Beaufort SC

This presentation will introduce the neophyte research presenter to the customs, roles, and experience of presenting at an OPEN FORUM session. The stages of an OPEN FORUM presentation including poster set-up, interacting with participants and moderators, presenting at the podium, and participating in moderated audience discussions will be addressed. Expectations for Editor's Choice and Poster Only presentations will be reviewed.

OPEN FORUM® — Poster Discussions #1

Supported by an unrestricted educational grant from



12:45 PM – 2:40 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.



Karen Schell



Thomas Lamphere



Teresa Volsko



Rich Branson

Exhibit Hall Hours:

Tuesday, Dec. 4, 10:30 am – 4:00 pm

Wednesday, Dec. 5, 9:30 am – 3:00 pm

Thursday, Dec. 6, 9:30 am – 2:00 pm



OPEN FORUM® — Poster Discussions #2

Supported by an unrestricted educational grant from



12:45 PM – 2:40 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

(Symposium) Patient Assessment

1:30 PM – 4:05 PM

► Auscultation of the Chest

1:30 PM – 2:05 PM

**Brian Cayko MBA RRT DCE,
Great Falls MT**

Content Category: AAC

Chest auscultation is an essential part of the physical examination. This lecture will describe breath sounds that might be heard during auscultation with an emphasis on the responsible pathology. Common disagreements in describing breath sounds will also be discussed.

► Systematic Interpretation of Adult Plain Films

2:10 PM – 2:45 PM

Jeff Anderson MA RRT, Boise ID

Content Category: AAC

This presentation will provide a systematic approach to interpretation of adult ICU plain films and will include several examples of common and uncommon abnormalities.

► Systematic Interpretation of Adult CT scans

2:50 PM – 3:25 PM

Jeff Anderson MA RRT, Boise ID

Content Category: AAC

This presentation will provide a systematic approach to interpretation of adult ICU CT scans and provide examples of common abnormalities along with paired plain films.

► ABG Interpretation: The Metabolic Side of Things

3:30 PM – 4:05 PM

Sara Mirza MD MS, Chicago IL

Content Category: AAC

This lecture on arterial blood gas interpretation will focus on metabolic acid-base disturbances. The presenter will describe important concepts related to these disturbances including primary causes, compensation, anion gap, and serum electrolytes.



Brian Cayko



Jeff Anderson

Content Categories

- AAC — Adult Acute Care
- CLP — Clinical Practice
- EDU — Education
- ETH — Ethics
- MGT — Management
- NPS — Neonatal/Pediatrics
- PFT — Pulmonary Function
- PTS — Patient Safety
- SDS — Sleep Medicine

(Symposium)

What It Will Take for Respiratory Care to Survive as a Profession

1:30 PM – 4:05 PM

► Challenges Facing Respiratory Care as a Profession: Making the Transition from World 1 to World 2

1:30 PM – 2:05 PM

**Garry Kauffman MPA RRT FAARC,
Walnut Cove NC**

Content Category: MGT

This presentation will review the status of the U.S. health care system with respect to payment methodologies, service delivery imperatives, and deliverables in terms of quality, patient safety and satisfaction, and financial performance, and illustrate the need to create a compelling value proposition for respiratory care services by making the transition from “counting procedures” to adding value.

► A New Paradigm for Benchmarking Respiratory Care Services

2:10 PM – 2:45 PM

Madhu Sasidhar MD, Cleveland OH

Content Category: MGT

This talk will describe the development, validation, and implementation of a new model for monitoring productivity.

► How Do We Establish the Value-Efficiency of Respiratory Care

2:50 PM – 3:25 PM

**Rob Chatburn MHHS RRT FAARC,
Cleveland OH**

This presentation will review the failings of legacy productivity and benchmarking

systems in respiratory care. It will then describe a new system to quantify the value of specific respiratory therapy activities and labor categories for more effective strategic planning.

► Will Respiratory Care Survive? Yes If . . .

3:30 PM – 4:05 PM

**Jamie Stoller MD MS FAARC,
Cleveland OH**

Content Category: MGT

This talk will outline the trends in health care that will be critical in determining the survival of respiratory care as a distinct profession.

Pulmonary Rehabilitation: Program Management

1:30 PM – 2:05 PM

**Trina Limberg BS RRT FAARC,
San Diego CA**

Content Category: MGT

Attend this session to review and address challenges facing programs with increased referrals, patient diversity, and clinic volume. Learn how to leverage for more resources and expand services.

Can You See It Now? Congenital Heart Defects + 3D Printing

1:30 PM – 2:05 PM

**Samantha Davis MS RRT AE-C,
Boise ID**

Content Category: EDU

3D printing technology has made its way into libraries, college campuses, and medical centers worldwide. Familiarize yourself with this emerging technology and leverage it to engage your learners.



Gary Kauffman



Rob Chatburn



Jamie Stoller



Trina Limberg



Samantha Davis

Managing Pulmonary Complications of Neuromuscular Disease

1:30 PM – 2:05 PM

Sara Mirza MD MS, Chicago IL

Content Category: CLP

Advances in the management of neuromuscular diseases have led to improved life expectancy for patients with these conditions. We are now encountering patients with chronic, neuromuscular respiratory weakness in both home and inpatient settings. This lecture will provide an update to respiratory therapists on ways to identify when these weaknesses warrant intervention and how to implement them in their practice.

PRO/CON: Walking Intubated Children Is Safe and Improves Outcomes

1:30 PM – 2:45 PM

PRO: Alex Rotta MD FCCM, Cleveland OH

CON: Martin Kneyber MD PhD FCCM, Groningen Netherlands

Content Category: NPS

Invasively mechanically ventilated pediatric patients are routinely managed with pharmacologic sedation and confined to bed. Two international experts will debate the benefits and risks of such an approach. Should intubated children be confined to bed or allowed to ambulate in the ICU — and potentially beyond? Time will be allocated for discussion with the audience.

(Symposium) Managing Ventilator Alarms: Establishing the Foundation

1:30 PM – 3:25 PM

► Alarm Fatigue: Implications for Patient Safety

1:30 PM – 2:05 PM

Marc Schlessinger MBA RRT FACHE, Plymouth Meeting PA

Content Category: PTS

A major focus of Joint Commission surveys for the next several years will be clinical alarm management. One key component of clinical alarm management is alarm fatigue. Much work has been done on physiologic monitoring and the attention will now move toward ventilator alarms. This presentation will help therapists take an objective look at alarm fatigue as it pertains to mechanical ventilation as well as BiPAP, ETCO₂, and pulse oximeters.

► Utilizing Middleware to Improve Patient Safety

2:10 PM – 2:45 PM

Connie Dills MBA RRT RPFT, West Hartford CT

Content Category: PTS

In this session attendees will be shown, through statistical data, how the utilization of middleware in managing ventilator alarms can reduce alarm fatigue and greatly enhance patient safety.

► Using Ventilator Benchmark Data To Improve Patient Safety

2:50 PM – 3:25 PM

Rich Zink MBA, West Lafayette IN

Content Category: PTS

In this session the Regenstrief National Center for Medical Device Informatics' (REMEDI) database will be introduced and used to demonstrate the value of shared data and knowledge in patient safety and quality improvement efforts. The presenter will discuss how hospitals have used shared data for benchmarking default ventilator settings and reducing non-actionable ventilator alerts.



Alex Rotta



Martin Kneyber



Marc Schlessinger



Connie Dills



Rich Zink

(Symposium)
Global Lung Function Initiative (GLI) Symposium

1:30 PM – 4:05 PM

► **Why Do We Need Reference Equations?**

1:30 PM – 2:05 PM

**Sanja Stanojevic PhD,
Toronto Ontario**

Content Category: PFT

The objectives of the GLI are to establish improved international reference equations for lung function tests using data collected under standardized conditions. This lecture will discuss common challenges in interpreting lung function tests, and the advantages of using GLI reference equations to characterize lung function in our patients.

► **Interpretation of Spirometry Results**

2:10 PM – 2:45 PM

Sanja Stanojevic PhD

Content Category: PFT

In 2012 the GLI published the reference equations for spirometry. The data included over 74,000 subjects and defined reference equations for ages 3-95 and four unique ethnic groups. The lecture will review the specifics about how the reference equations were derived and the implications for their practical use.

► **Lung Volumes**

2:50 PM – 3:25 PM

**Gregg Ruppel MEd RRT RPFT,
Oro Valley AZ**

Content Category: PFT

The GLI Network is in the process of collecting data on lung volumes. This lecture will give a progress report on the work of the lung volume group to date.

► **Implementation of DLCO Equations**

3:30 PM – 4:05 PM

Sanja Stanojevic PhD

Content Category: PFT

In 2017 the GLI published the reference equations for transfer factor of the lung (diffusing capacity). The data was derived from over 9700 subjects ages 5 to 85 years. The lecture will review the specifics about how the reference equations were derived and the implications for their practical use.

Review of the Literature and Latest Developments in Pulmonary Rehab

2:10 PM – 2:45 PM

Brian Carlin MD FAARC, Sewickley PA

Content Category: CLP

This talk will discuss the latest developments in the field of pulmonary rehabilitation over the last year.

Digital Merit Badges: Recognizing Student Achievement

2:10 PM – 2:45 PM

**Tammy Kurszewski DHSc RRT
RRT-ACCS, Wichita Falls TX**

Content Category: EDU

Respiratory programs have long relied on the concept of competencies to assure knowledge and skill of graduates. The emergence of digital merit badges moves one step further in engaging the millennial learner while also validating soft skills not previously recognized such as critical thinking, teamwork, and leadership under the traditional format. This presentation will introduce the digital merit badge and its potential role in respiratory therapy education.



Sanja Stanojevic



Gregg Ruppel



Brian Carlin



Tammy Kurszewski

Year in Review Symposium

2:10 pm – 5:25 pm

► **Adult Invasive Mechanical Ventilation**

2:10 PM – 2:45 PM

**Karsten Roberts MS RRT FAARC,
Philadelphia PA**

Content Category: AAC

The lecturer will describe the most important publications in adult invasive mechanical ventilation in the last calendar year.

► **Pediatric Mechanical Ventilation**

2:50 PM – 3:25 PM

**Craig Smallwood PhD RRT,
Jamaica Plain MA**

Content Category: NPS

The most important publications in pediatric mechanical ventilation in the last year will be described.

► **Noninvasive Respiratory Support**

3:30 PM – 4:05 PM

**John Davies MSc RRT FAARC,
Cary NC**

Content Category: AAC

NIV changed mechanical ventilation in the last two decades. The use of high flow nasal oxygen has expanded the use of noninvasive support for respiratory failure. This talk will review the use of NIV and noninvasive respiratory support over the last year.

► **Patient Transport**

4:10 PM – 4:45 PM

**Dario Rodriguez MSc RRT,
Cincinnati OH**

Content Category: AAC

The papers published in the last year related to transport of the patient with respiratory disease and mechanical ventilation will be described.

► **Sleep Medicine**

4:50 PM – 5:25 PM

**Brian Carlin MD FAARC,
Sewickley PA**

Content Category: SDS

This talk will discuss the latest updates in the field of sleep disorders medicine over the last year. This will include developments in sleep disordered breathing, insomnia, and restless leg syndrome.

Continuing Respiratory Care Education (CRCE)

AARC Congress 2018 is approved for all the credit hours you need to maintain your state license, more than 20 hours.



Karsten Roberts



Craig Smallwood



John Davies



Dario Rodriguez



Brian Carlin

Pulmonary Rehabilitation: The New 2018 Guidelines

2:50 PM – 3:25 PM

Gerilynn Connors RRT, Fairfax VA

Content Category: CLP

This talk will discuss the key changes in the upcoming 2018 guidelines for pulmonary rehabilitation.

Ventilator Management Strategies To Minimize Neonatal Lung Injury

2:50 PM – 3:25 PM

James Kiger MD, Pittsburgh PA

Content Category: NPS

As infants are especially susceptible to ventilator-induced lung injury of all forms, a careful and rational approach to ventilation that seeks to minimize harm is potentially beneficial in the reduction of chronic lung disease. This presentation will discuss evidence-based choices for ventilator management with a focus on reducing the risks of volutrauma, atelectrauma, and biotrauma.

Using Apps to Engage Interprofessional Learners

2:50 PM – 3:25 PM

**Douglas Masini EdD RRT FAARC,
Savannah GA**

Content Category: EDU

Apps on tablets, computers, or phones allow the instructor to teach respiratory care procedures, as well as lung and airway anatomy and physiology, in a visually appealing way that contributes simultaneously to the cognitive, effective, and hands-on psychomotor skills of the student in orientation. The author will demonstrate how apps provide a low-cost alternative to lectures, photos, and slides of the cardiopulmonary system.

OPEN FORUM® — Poster Discussions #3

Supported by an unrestricted educational grant from



3:15 PM – 5:10 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

OPEN FORUM® — Poster Discussions #4

Supported by an unrestricted educational grant from



3:15 PM – 5:10 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

Ethics: Critical Care or Euthanasia?

3:30 PM – 4:05 PM

**Melissa Ash BS RRT AE-C,
Downingtown PA**

Content Category: ETH

Euthanasia has been discussed since the ancient Roman and Greek times. Today it is still a hot topic. This lecture will address whether respiratory therapists are unknowingly participating in euthanasia and will compare and contrast comfort care with euthanasia. Specific case studies will be discussed.



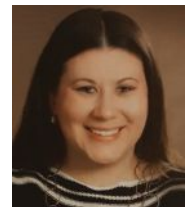
Gerilynn Connors



James Kiger



Douglas Masini



Melissa Ash

Case Studies from Case Management: Successes and Shortcomings

3:30 PM - 4:05 PM

Krystal Craddock BSRC RRT AE-C, Roseville CA

Content Category: CLP

This lecture will discuss how the respiratory therapist's expertise can play a vital role in respiratory care case management when discharging patients to post-acute care. Case studies will be presented on successful discharges and discharges where there were opportunities for improvement.

(Symposium) Bronchopulmonary Dysplasia

3:30 PM - 4:45 PM

► Current Challenges, Outcomes, and Future Direction

3:30 PM - 4:05 PM

Brad Kuch MHA RRT FAARC, Havertown PA

Content Category: NPS

Management of BPD and chronic lung disease requires a multidisciplinary team approach to navigate clinical and developmental challenges. The presentation will discuss the current challenges surrounding the care of these complex patients from acute phase through discharge. Outcomes and future therapeutic options will be discussed.

► Clinical Management of Severe BPD

4:10 PM - 4:45 PM

James Kiger MD, Pittsburgh PA

Content Category: NPS

Infants who have developed bronchopulmonary dysplasia have significant challenges in the management of their ventilation and associated comorbidities. This presentation will discuss ventilator strategies for infants who have already been diagnosed with severe BPD as well as evidence-based approaches to the management of nutrition, pulmonary hypertension, and development in these vulnerable infants.



Krystal Craddock



Brad Kuch

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Putting Research into Your Curriculum

3:30 PM – 4:05 PM

Aaron Light DHSc RRT RRT-ACCS,
Springfield MO

Content Category: *EDU*

The presenter will demonstrate ways to incorporate a research component into a curriculum. This presentation will discuss ways to include actual research projects like bench studies and human testing studies. Examples of how he has performed over 60 student-led research projects and transitioned them into OPEN FORUM abstracts for the AARC will be described.

Nurturing a Clinical Problem into a Research Project

4:10 PM – 4:45 PM

Dave Burnett PhD RRT AE-C,
Kansas City KS

Content Category: *EDU*

Many respiratory therapists are expert clinicians and have great ideas about improving clinical care. However, they are unsure of how to take a clinical problem and create a meaningful and impactful research project. This presentation will discuss how to form a research question, conduct a productive literature search, develop your aims and hypothesis, and choose the methodology for a project.

The Patient Experience: Is There Common Sense in Medicine?

4:10 PM – 4:45 PM

Thomas Lamphere RRT RPFT FAARC,
Sellersville PA

Content Category: *PTS*

Health care workers are told by their administrators to not only deliver quality medical care, but to ensure patients have a great experience while in the hospital. However, most health care workers have never been a patient themselves and fail to recognize things they do every day that directly relate to a poor patient experience. This presentation will follow the presenter as a case study to examine the use of common sense in medicine.

PRO/CON: RTs Add Value to Health Care Delivery

4:10 PM – 5:25 PM

Douglas Laher MBA RRT FAARC,
Irving TX

Garry Kauffman MPA RRT FAARC,
Walnut Cove NC

Content Category: *MGT*

This pro/con debate will explore whether or not RTs add value to health care delivery in the realms of quality, safety, and financial performance. Presenters will defend their position through published evidence, financial data survey results, and outcome metrics. Do RTs really add value, or is the profession an unneeded, task-driven commodity that hospitals can do without? As an added twist, a coin will be flipped at the onset of the presentation to determine which side of the debate each person will take.



Aaron Light



Dave Burnett



Thomas Lamphere



Douglas Laher



Garry Kauffman



The 64th International Respiratory
Convention & Exhibition

Spirometry in the Primary Care Setting

4:10 PM – 4:45 PM

**Curt Merriman RRT CPFT,
Burnsville MN**

Content Category: PFT

Spirometry in primary care settings has a long history of poor quality. Ideally, qualified respiratory therapists should be performing these tests. In reality that rarely happens. Coordinated efforts with pulmonary function lab personnel for training and quality control can help provide improved quality and assure long-term quality improvements.

Identifying and Managing At-Risk Extubations

4:10 PM – 4:45 PM

**Carl Hinkson MS RRT FAARC,
Marysville WA**

Content Category: AAC

Can clinicians accurately identify patients that are at risk for post-extubation complications? This evidence-based presentation will help clinicians be better prepared to identify these high risk patients. The management of a failed extubation will also be presented.

Pulmonary Rehabilitation for the Non-Obstructed Patient

4:10 PM – 4:45 PM

**Trina Limberg BS RRT FAARC,
San Diego CA**

Content Category: CLP

Attend this session to review evidence-based practice for training and educating this growing population of patients.

How To Explain Spirometry to a PCP

4:50 PM – 5:25 PM

Amanda Clark RRT, Columbia SC

Content Category: PFT

Primary care providers are charged with being an expert in a variety of disease processes and in interpreting labs tests, radiologic and otherwise. There has been a tremendous amount of misdiagnosis of pulmonary disease from lack of interpretive strategies for simple diagnostics such as oximetry and spirometry.

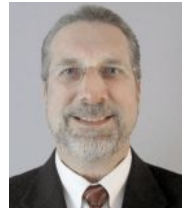
Implications of Aerosol Delivery in a Pediatric Population

4:50 PM – 5:25 PM

Tim Myers MBA RRT FAARC, Avon OH

Content Category: NPS

Aerosolized medications are commonly administered, often without supportive data. This presentation will review the current literature to support an evidence-based approach to aerosol delivery in the pediatric population.



Curt Merriman



Carl Hinkson



Trina Limberg



Amanda Clark



Tim Myers

AARC Congress 2018

Tuesday, December 4

Passive Smoke Exposure in Children: Health Risks of Smoke Exposure

4:50 PM – 5:25 PM

Natalie Napolitano MPH RRT FAARC, Philadelphia PA

Content Category: CLP

This lecture will discuss the known health hazards to children with exposure to second- and third-hand smoke.

Can Extubation Failure Be Predicted?

4:50 PM – 5:25 PM

David Vines RRT, Wheaton IL

Content Category: AAC

Extubation failure occurs in 10-20% of extubated patients and is associated with poor clinical outcomes. Many factors lead to extubation failure, but can it be predicted? This presentation will review published research associated with predicting extubation failure. Extubation failure prevention strategies will also be discussed.

RESPIRATORY CARE

OPEN FORUM® Symposia
sponsored by



Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. 14 OPEN FORUM Symposia will be presented during the 3 ½ days of AARC Congress 2018.

Hot Topics in Higher Education: Incorporating Disease Management into the RC Curriculum

4:50 PM – 5:25 PM

Douglas Masini EdD RRT FAARC, Savannah GA

Brady Scott MS RRT FAARC, Wheaton IL

Content Category: MGT

Disease management is an important, emerging role for respiratory therapists. This presentation will include suggestions for including disease management in both didactic coursework and in clinical experiences.

A Safe Approach in Caring for Tracheostomy Patients across the Continuum

4:50 PM – 5:25 PM

Kathleen Spihlman BS RRT, St Louis MO

Content Category: CLP

This lecture will discuss how to achieve positive outcomes to improve care for the tracheostomy patient and transition them successfully from acute to post-acute. This lecture will review the overall risks to tracheostomy patients when entering into any health care system and clear methods to eliminate that risk to this vulnerable population.



Natalie Napolitano



David Vines



Douglas Masini



Brady Scott



Kathleen Spihlman

Special Events

AARC Awards Ceremony

Tuesday, December 4
8:00 am – 9:30 am

Keynote Address

Tuesday, December 4
9:35 am – 10:25 am

AARC Welcome Party

Tuesday, December 4
8 pm

Flag Folding Ceremony

Thursday, December 6
8:50 am – 9:20 am

41st Sputum Bowl Finals & Reception

Thursday, December 6
Finals: TBD
Reception: 5:15pm - 7:30pm

Sponsored by

Medtronic

Further, Together

Closing Ceremony

Friday, December 7
12:45 pm – 2:15 pm





Promote. Educate. Generate Awareness.

RT Career & Patient Brochures

Great for
RC Week
Handouts!

Public Education

For Current or Future Patients

Brochure defines what a respiratory therapist is and how they benefit a patient's overall respiratory health. Familiarizes the patient with respiratory care and the treatments performed.

Package of 50. #BR0015

Career Information

For Students Considering A Career in Health Care

Defines the profession and the growing career opportunities as a respiratory therapist. Describes how to become an "RRT," salary expectations and the numerous specialty areas.

Package of 50. #BR0016

For Individuals Considering a Career Change

Presents the exciting and rewarding career opportunities as a respiratory therapist. Describes how to become an "RRT," salary expectations and the numerous specialty areas.

Package of 50. #BR0017

Order Online at the AARC Store:
c.aarc.org/go/career

**Get To Know
Your Respiratory
Therapist**

Respiratory therapists assist with a number of breathing problems and ensure that you maintain good lung health.

The American Association for Respiratory Care

**IMAGINE YOURSELF AS A
HEALTH CARE PROFESSIONAL?**

**Live Your Dream!
Be a Respiratory
Therapist**

Make a *difference* in someone's life
Provide care and help others
Be part of a *health care team*

The American Association for Respiratory Care

Create your future.

**Be a Respiratory
Therapist**

Change your career, your life, your corner of the world to help others breathe easier...

The American Association for Respiratory Care

Wednesday

AARC Annual Business Meeting

7:30 AM – 8:30 AM

Brian Walsh PhD RRT RRT-NPS FAARC
AARC President | *Presiding*

Karen Schell DHSc RRT RRT-NPS RPFT
AARC President-elect | *Presiding*

This is the official 2018 Annual Business Meeting of the AARC. Reports from AARC leadership are presented. 2019 AARC officers, Board of Directors, and officers from the House of Delegates are installed. The meeting concludes with an address from 2019-2020 AARC President Karen Schell.

Sputum Bowl Preliminaries

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Further, Together

8:00 AM – 6:00 PM

Renee Wunderley BS RRT RRT-NPS | *Presiding*

Student teams from the AARC State Societies compete in the preliminary competitions. The top four teams will face off in the Finals on Thursday, December 6.

6th Thomas L Petty Memorial Lecture: Everyone Needs Oxygen

8:40 AM – 9:30 AM

Jerry Krishnan MD PhD, Chicago IL



Content Category: CLP

The presentation will discuss the evidence supporting the use of supplemental oxygen in COPD and efforts underway to promote stakeholder-supported strategies to promote appropriate use of home oxygen during hospital-to-home transitions.

AARC Congress 2018

Post-Acute Care Section Meeting

9:30 AM – 10:30 AM



Krystal Craddock BSRC RRT AE-C/
Presiding

Gene Gantt RRT FAARC/Presiding

Zach Gantt RRT/Presiding

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.

Neo-Peds Section Meeting

9:35 AM – 10:05 AM



Steve Sittig RRT RRT-NPS C-NPT
FAARC/Presiding

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.

OPEN FORUM® — Poster Discussions #5

Supported by an unrestricted educational grant from



10:00 AM – 11:55 AM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

OPEN FORUM® — Poster Discussions #6

Supported by an unrestricted educational grant from



10:00 AM – 11:55 AM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

Industry Support Statement

- The AARC is proud of the collaboration we have had with friends in industry for many years, and we wish to acknowledge our appreciation for their unrestricted educational grants for AARC Congress 2018.
- All sponsored sessions will be identified in the program, with signage, and verbally at the lectern.
- The AARC accepts support only on the condition that the Program Committee be the sole owner of all sessions, including selection of speakers and topics.

(Symposium)
**Respiratory Compromise:
From Concept to Care**

10:15 AM – 12:25 PM

Sponsored by



► **Introduction**

10:15 AM - 10:25 AM

TBD

Content Category: CLP

Respiratory Compromise is a state in which there is a high likelihood of decompensation into respiratory insufficiency, respiratory failure, or death but in which screening, monitoring, and specific interventions might prevent or mitigate decompensation.

► **History of Respiratory Compromise Institute (RCI)**

10:25 AM – 10:45 AM

Phil Porte, Vienna VA

Content Category: CLP

The Institute was formalized to develop approaches to education of the medical community and the general public, and to develop research opportunities that would assist the broad medical community to address respiratory compromise in varied settings including the hospital, nursing homes, and the home.

► **Populations at Risk:
Medicare Data Mining**

10:50 AM – 11:40 AM

**Sidney Braman MD FCCP,
New York NY**

James Lamberti MD, Annandale VA

Content Category: CLP

Respiratory Compromise is one of the top 5 conditions leading to increasing hospital costs and the 3rd leading cause for increasing hospital inpatient cost in the United States. General care floor patients with respiratory compromise are 29 times more likely to die; more than 60% of arrests brought on by respiratory compromise are potentially preventable.

► **Future Research Considerations**

11:45 AM – 12:25 PM

Jeff Vender MD MBA, Winnetka IL

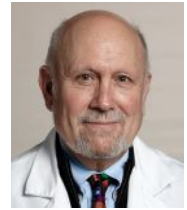
**Neil R MacIntyre MD FAARC,
Durham NC**

Content Category: CLP

As the concept of respiratory compromise continues to grow, the RCI seeks to identify specific research initiatives in both the medical and surgical settings from questions identified from big data.



Phil Porte



Sidney Braman



James Lamberti



Jeff Vender



Neil R MacIntyre

Wednesday, December 5

(Symposium)

Update on Tracheostomy

10:30 AM – 12:25 PM

► Tracheostomy and Aerosols

10:30 AM – 11:05 AM

Ariel Berlinski MD, Little Rock AK

Content Category: CLP

Optimizing aerosolized medication delivery to spontaneously breathing patients with tracheostomies is an important aspect of disease management but clinicians have little guidance in this process. This presentation will discuss the literature published on aerosolized medication administration to this population and provide practical guidance.

► Unique Aspects of Pediatric Tracheostomies

11:10 AM – 11:45 AM

Kathleen Deakins RRT RRT-NPS, Cleveland OH

Content Category: CLP

Pediatric patients are not simply "small people." Understanding the nuances of this population in context with tracheostomy management is vital. This presentation will discuss how the initiation, airway selection, and management of tracheostomy pediatric patients differ from adults.

► Controversies in Tracheostomy Management

11:50 AM – 12:25 PM

Constance Mussa PhD RRT RRT-NPS, Chicago IL

Content Category: CLP

Many different practices exist in the management of tracheostomy sites and airways. Do we clean with peroxide? How often do tracheostomy tubes need

to be changed? This presentation will address common questions focused on tracheostomy management with information from the literature.

(Symposium)

Pharmacology Review of Medications Used In Sleep

10:30 AM – 11:45 AM

► Meds That Make You Night Night

10:30 AM – 11:05 AM

Jessica Schweller MS RRT RN-CNP, Worthington OH

Content Category: SDS

This lecture will focus on current sleep aids used today and update the learner on the mechanism of action of how sleep aids work on the brain. This lecture will also visit the side effects of the medications and alternatives to medications.

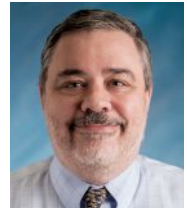
► Meds That Make You Wakey Wakey

11:10 AM – 11:45 AM

Jessica Schweller MS RRT RN-CNP, Worthington OH

Content Category: SDS

This lecture will focus on the use of stimulant therapy in patients with shift work disorder, narcolepsy, and hypersomnia disorders. The lecture will also address the side effects that come with the medication and review the pharmacology and mechanism of action of each medication discussed.



Ariel Berlinski



Kathleen Deakins



Constance Mussa



Jessica Schweller

(Symposium)
Hot Topics in Higher Education
10:30 AM – 11:45 AM

► **What RC Faculty
"Need to Know"**
10:30 AM – 11:05 AM

**Bill Galvin MEd RRT FAARC,
Havertown PA**

Content Category: EDU
Higher education is undergoing significant change and facing issues of considerable importance to the respiratory care educator. Funding, attrition, quality outcomes, innovations in technology, faculty development, classroom management, and safety are just a few of the more prominent issues facing higher academia. This presentation will entail a conversation on some of the more critical issues that all RC faculty should appreciate and comprehend.

► **A Roundtable Discussion**
11:10 AM – 11:45 AM

Content Category: EDU
As a follow-up to Hot Topics in Higher Education, participants will have the opportunity to discuss specific topics of interest in greater depth with other interested peers. Participants will be able to share their own experiences and seek answers to questions regarding the topics presented previously.

Content Categories

AAC — Adult Acute Care
CLP — Clinical Practice
EDU — Education
ETH — Ethics
MGT — Management
NPS — Neonatal/Pediatrics
PFT — Pulmonary Function
PTS — Patient Safety
SDS — Sleep Medicine

**Pediatric ARDS:
Do We Have Consensus Yet?**
10:30 AM – 11:05 AM

Neal Thomas MD MSc, Hershey PA

Content Category: NPS
Since the publication of the Pediatric Acute Lung Injury Consensus Conference guidelines, have the definitions for pediatric ARDS and approaches to management become more standardized? This presentation by one of the leaders of the PALICC initiative will review the highlights of the consensus conference and discuss the subsequent data that have supported and refuted the initial recommendations. Time will be allocated for discussion with the audience.

**Your Best Friend
on Your Worst Day:
RTs on Transport Teams**
10:30 AM – 11:05 AM

Jon Inkrott RRT RRT-ACCS, Orlando FL

Content Category: CLP
In this talk we will discuss the role of the RT in the highly competitive and acute environment of critical care transports. Safety topics will also be discussed. We will also identify the specific skill sets and personality traits that teams look for in a quality individual who can work well with a single other team member in the most acute environment and do it well. Case studies will also be reviewed.



Bill Galvin



Neal Thomas



Jon Inkrott

(Symposium)

Targeted Oxygen Therapy

10:30 AM – 12:25 PM

► Oxygen Toxicity — A Clinical Perspective

10:30 AM – 11:05 AM

**Rich Kallet MS RRT FAARC,
San Francisco CA**

Content Category: AAC

Oxygen toxicity has been described for over 100 years. Conventional wisdom has suggested that an FIO₂ < 0.60 is safe in adults. However hyperoxia has been associated with negative outcomes. What is a safe level of FIO₂ in the ICU — is there one?

► Permissive Hypoxemia — How Low Can We Go?

11:10 AM – 11:45 AM

**Neil R MacIntyre MD FAARC,
Durham NC**

Content Category: AAC

Patients experience a wide range of oxygenation values over the course of treatment. Hypoxia is well tolerated in some circumstances of human existence. When is it better to focus on lung protection and allow mild to moderate hypoxemia? How low a PaO₂ can be tolerated? What are the consequences?

► Oxygen Requirements of Ventilated Patients

11:50 AM – 12:25 PM

**Dario Rodriguez MSc RRT,
Cincinnati OH**

Content Category: AAC

Oxygen is typically set to a desired oxygen saturation or PaO₂. Data suggests that once the FIO₂ is < 0.50 clinicians rarely decrease

the FIO₂ regardless of PaO₂. How much oxygen do mechanically ventilated patients require? How should we set FIO₂?

Impact of a Post-Discharge Integrated Disease Management Program

10:30 AM – 11:05 AM

Umur Hatipoglu MD, Cleveland OH

Content Category: MGT

Readmission following a hospitalization for COPD is associated with significant health care expenditure. This talk describes a multi-component COPD post-discharge integrated disease management program that was implemented at the Cleveland Clinic to improve the care of patients with COPD and reduce readmissions. The results of a study evaluating the program which reduced 90-day readmissions and identified predictors of readmission will be described.

OPEN FORUM® — Posters Only #1

Supported by an unrestricted educational grant from



10:30 AM – 1:30 PM

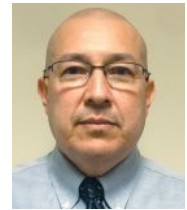
Researchers and clinicians present the results of their work in this Posters Only session. Authors available from 12:00 pm – 1:30 pm for questions and answers. Poster Walk Rounds led by Bill F Galvin MEd RRT CPFT AE-C FAARC and Dean R Hess PhD RRT FAARC.



Rich Kallet



Neil R MacIntyre



Dario Rodriguez



Umur Hatipoglu



The 64th International Respiratory
Convention & Exhibition

How to Use Epic to Automate RT Workload Acuity and Staffing

11:10 AM – 11:45 AM

Lindsay Hattan BS RRT, Omaha NE

Content Category: MGT

This presentation will focus on how to build a scoring system in Epic that will automatically calculate workload acuity numbers. Learn how to build rules in Epic that assign points based on respiratory therapy orders and documentation. This information can be reported in real-time per shift, listed by floor and by individual RT, for building assignments that optimize staffing, achieve staffing levels adjusting to patient demand, and document productivity internally as well as in comparison to other RT departments in other organizations.

Fight or Flight? Pediatric Stabilization Prior to Transport

11:10 AM – 11:45 AM

Jennifer Watts RRT RRT-NPS C-NPT, Romeville IL

Content Category: NPS

This presentation will focus on the steps to be taken to prepare the pediatric patient prior to their being sent to a higher level of care. The presentation will also discuss the difference between a "scoop and go" versus a "stay and play" pediatric transport situation.

Controversies in Pediatric Respiratory Care: An Interactive Debate and Discussion

11:10 AM – 12:25 PM

Alex Rotta MD FCCM, Cleveland OH

Ira Cheifetz MD FAARC, Durham NC

Content Category: NPS

In this interactive session two international experts will impromptu debate hot topics in pediatric respiratory care. Input from the audience will be encouraged.

Respiratory Compromise in Post-Acute Care

11:50 AM – 12:25 PM

Gene Gantt RRT FAARC, Livingston TN

Content Category: CLP

Respiratory Compromise (RC) is a state in which there is a high likelihood of de-compensation into respiratory insufficiency, respiratory failure, or death but in which specific interventions (monitoring and/or therapies) might prevent or mitigate de-compensation. More than 60% of arrests brought on by respiratory compromise are potentially avoidable. This session will review the potential for respiratory compromise in post-acute care.

Implementation Science in Respiratory Therapy

11:50 AM – 12:25 PM

Thomas Malinowski MScRT RRT FAARC, Charlottesville VA

Content Category: MGT

Implementation Science is the study of strategies that help overcome the challenges associated with translating evidenced-based health care recommendations into practice. This presentation describes how Implementation Science can help migrate respiratory research into more common daily use and increase the number of evidenced-based interventions that are applied.



Lindsay Hattan



Jennifer Watts



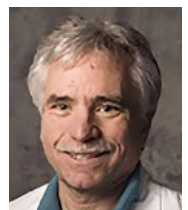
Alex Rotta



Ira Cheifetz



Gene Gantt



Thomas Malinowski

On The Flip Side: Transport in the Prone Position

11:50 AM – 12:25 PM

Jon Inkrott RRT RRT-ACCS, Orlando FL

Content Category: AAC

Prone position during mechanical ventilation in the ARDS patient remains a solid treatment intervention that is practiced in many ICUs. However, when these patients fail to improve and require a higher acuity of care, is it a safe option to transport these patients while in the prone position? We will discuss case studies that explore options when transporting these critically ill patients.

Behavioral Therapy for the Management of Insomnia

11:50 AM – 12:25 PM

Meena Khan MD, Columbus OH

Content Category:

The overall aim of this lecture is to discuss the psychological and behavioral barriers in those with insomnia and the behavioral strategies to improve their sleep.

Sleep Section Meeting

12:30 PM – 1:00 PM



**Jessica Schweller MS RRT RN-CNP/
Presiding**

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.

Surface to Air Transport Section Meeting

12:30 PM – 1:00 PM



**Oliva Kaulen BHS RRT RRT-NPS/
Presiding**

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.

OPEN FORUM® — Poster Discussions #7

Supported by an unrestricted educational grant from



12:30 PM – 2:25 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

OPEN FORUM® — Poster Discussions #8

Supported by an unrestricted educational grant from



12:30 PM – 2:25 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.



Jon Inkrott



Meena Khan

Management Section Meeting

1:15 PM – 1:45 PM



Cheryl Hoerr MBA RRT FAARC/
Presiding

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate..

(Symposium) Recognition and Management of Sepsis

1:45 PM – 3:00 PM

► Diagnosis and Management of Sepsis and Septic Shock

1:45 PM – 2:20 PM

Robert Balk MD, Chicago IL

Content Category: AAC

Sepsis is a life-threatening condition characterized by systemic inflammation secondary to infection. This presenter will describe the current approach to the diagnosis and management of sepsis and septic shock in adult patients.

► Sepsis and Ventilatory Support

2:25 PM – 3:00 PM

Robert Balk MD

Content Category: AAC

Sepsis and respiratory failure can co-exist in critically ill patients making the management of these patients very challenging. This lecture will discuss lung dysfunction/injury in sepsis and management strategies to include: noninvasive and invasive mechanical ventilatory support, lung-protective ventilation, and weaning.

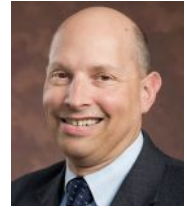
Understanding and Implementing Successful Planning

1:45 PM – 2:20 PM

Charles Bangley BS RRT,
Winterville NC

Content Category: MGT

Respiratory care managers have numerous distractions that can prevent them from assuring successful planning. The use of an organized approach which includes annual planning and employee engagement is key to staying on the path. This presentation will review easy-to-follow planning sessions and allow time for the participants to join in a brief planning session and staff engagement actions.



Robert Balk



Charles Bangley

Special Note

The largest respiratory care Exhibit Hall in the world will be open in Las Vegas, NV Tuesday through Thursday, December 4–6.

Most exhibitors will have clinical specialists on hand to answer questions on products, services and technology.

Don't miss this unique opportunity with all companies in the respiratory care industry.

(Symposium)
**Updates in Pulmonary Fibrosis
Treatment and Management**

Sponsored by



1:45 PM – 3:00 PM

► **Current Clinical Drug Trials
in the Pipeline for IPF and PF**

1:45 PM – 2:20 PM

**Gregory Cosgrove MD FCCP,
Denver CO**

Content Category: CLP

Pulmonary Fibrosis is a life-threatening condition of the lungs where tissues become thickened, stiff, and scarred over a period of time. Intense research to identify treatment options for specific types of pulmonary fibrosis disease is ongoing. This lecture will provide an overview of potential future therapies.

► **The Benefits of
Non-Pharmacologic
Interventions in Patients**

2:25 PM – 3:00 PM

James Lamberti MD, Annandale VA

Content Category: CLP

While pharmacologic treatment options for pulmonary fibrosis are ongoing, disease management strategies to help patients manage symptoms and prevent future complications also are key options. This lecture will look at the benefits of anaerobic exercise and other non-pharmacologic interventions.

(Symposium)
**Monitoring during
Mechanical Ventilation**

1:45 PM – 3:00 PM

► **The Role of Monitoring
During Mechanical Ventilation**

1:45 PM – 2:20 PM

Eddy Fan MD PhD, Toronto Ontario

Content Category: AAC

Monitoring is essential during mechanical ventilation. This lecture will provide the rationale for essential monitoring at the bedside and discuss advanced monitoring techniques that contribute to personalizing mechanical ventilation.

► **Visualizing Mechanical
Ventilation**

2:25 PM – 3:00 PM

**Thomas Piraino RRT,
Beamsville Ontario**

Content Category: AAC

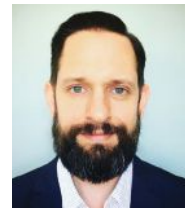
Respiratory therapists are important for the safe monitoring of mechanically ventilated patients. Applying imaging techniques such as electrical impedance tomography and ultrasound to mechanically ventilated patients is gaining popularity in the literature. This lecture will discuss these techniques and where respiratory therapists play a key role.



James Lamberti



Eddy Fan



Thomas Piraino

AARC's 34th New Horizons in Respiratory Care Symposium

Ventilator Associated Events — Surveillance and Understanding

1:45 pm – 5:00 pm

► VAE Surveillance — What It Is and What It Isn't 1:45 PM – 2:20 PM

**Michael Klompas MD MPH,
Boston MA**

Content Category: PTS

Changes to the CDC surveillance for ventilator-associated events (VAE), formerly VAP, have led to confusion regarding terminology and treatment. This lecture will explain the importance of surveillance using these definitions and separate this surveillance from issues related to clinical manifestations of the disease.

► Aerosolized Antibiotics — Now What? 2:25 PM – 3:00 PM

**Rajiv Dhand MD FAARC FCCP,
Knoxville TN**

Content Category: CLP

Two recent, large randomized controlled trials have failed to show any advantage of adjunctive aerosolized antibiotics in the treatment of ventilator-associated infections. Is there any role for aerosolized antibiotics in ventilated patients?

► The Role of Specialty Tubes in Preventing VAE 3:05 PM – 3:40 PM

Thomas Piraino RRT

Content Category: PTS

A number of alterations to endotracheal tubes have been introduced to reduce the risk of aspiration of oral and gastric

secretions or to reduce bio-film. What is the evidence? Are these devices worth the cost?

► Airway Management and VAE 3:45 PM – 4:20 PM

**Brady Scott MS RRT FAARC,
Wheaton IL**

Content Category: PTS

Describe the methods of airway care which impact VAE. This includes closed vs open suctioning, cuff pressure management, removal of secretions above the cuff without a specialty ET tube, use of saline for instillation, and devices for cleaning the inside of the ET tube.

► Guidelines and Bundles — What Does the Evidence Support? 4:25 PM – 5:00 PM

**Rich Kallet MS RRT FAARC,
San Francisco CA**

Content Category: PTS

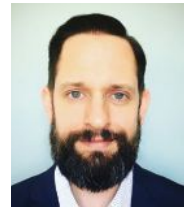
This lecture will discuss the new guidelines for VAP management including prevention, diagnosis, and treatment. This will include the use of NIV, daily SBT/SAT, and sedation interruption.



Michael Klompas



Rajiv Dhand



Thomas Piraino



Brady Scott



Rich Kallet

Wednesday, December 5

AARC Congress 2018

(Symposium)

Pediatric Respiratory Care: Challenging the Status Quo

1:45 PM – 4:20 PM

► 6 ml/kg Tidal Volume is Not Appropriate for All Patients

1:45 PM – 2:20 PM

Neal Thomas MD MSc, Hershey PA

Content Category: NPS

Adult data support the use of 6 ml/kg tidal volume for ARDS. Despite the fact that pediatric data do not support this approach it is commonly extrapolated to infants and children. This presentation will question this approach. Data in support of alternative tidal volume management approaches will be discussed.

► Our Current Management Approach to HFOV is Wrong

2:25 PM – 3:00 PM

**Martin Kneyber MD PhD FCCM,
Groningen Netherlands**

Content Category: NPS

Recent data have questioned the usefulness of HFOV. It remains unclear whether the recently reported negative outcomes are related to HFOV per se or rather the traditional approaches to clinical management. This presentation will question the status quo by exploring potential alternative HFOV management strategies.

► ECMO Should Not Be Reserved for Rescue Use Only

3:05 PM – 3:40 PM

Ira Cheifetz MD FAARC, Durham NC

Content Category: NPS

ECMO has traditionally been used for refractory ARDS when all else fails. This presentation will question the status quo. Consideration of using venovenous ECMO as a strategy earlier in the course of pediatric ARDS management will be explored.

► Mechanically Ventilated Children Should Be Awake

3:45 PM – 4:20 PM

**Sapna Kudchadkar MD PhD,
Baltimore, MD**

Content Category: NPS

Mechanically ventilated children have traditionally been heavily sedated. One must question whether this is the best approach given increasing knowledge of the adverse effects of pharmacologic sedation. This presentation will question the status quo of sedating mechanically ventilated children by discussing potential benefits of keeping these children awake. Potential safety concerns will also be considered.



Neal Thomas



Martin Kneyber



Ira Cheifetz



Sapna Kudchadkar

Exhibit Hall Hours:

Tuesday, Dec. 4, 10:30 am – 4:00 pm

Wednesday, Dec. 5, 9:30 am – 3:00 pm

Thursday, Dec. 6, 9:30 am – 2:00 pm



Post-Acute Recognition of Sepsis/SIRS

1:45 PM – 2:20 PM

Stephanie Williams BS RRT, Nashville TN

Content Category: CLP

80% of all sepsis begins outside of the hospital. Respiratory patients are at increased risk of developing sepsis due to chronic infections and frequent hospitalizations. If you work in a post-acute setting are you able to spot sepsis early and get the patient the treatment they need? How do you define post sepsis impact, and how does this affect our patient population?

(Symposium)

Sleep and the Heart: Why Should I Worry?

1:45 PM – 3:00 PM

► Sleep and the Heart

1:45 PM – 2:20 PM

Barbara Phillips MD, Lexington KY

Content Category: SDS

This talk will discuss the interactions between sleep-disordered breathing and cardiovascular disease.

► Treating Central Sleep Apnea

2:25 PM – 3:00 PM

Barbara Phillips MD

Content Category: SDS

This talk will discuss the implications of the treatment of central sleep apnea with adaptive servo ventilation (ASV).

Moving a Profession Forward but Who Wants to Take the Lead?

2:25 PM – 3:00 PM

Frank Salvatore Jr MBA RRT FAARC, Danbury CT

Content Category: MGT

This program looks at all the bluster of wanting to move the profession forward, while every major aspect of the profession points to someone else needing to do more. During this presentation for RT leaders we'll look at just what's being done by both to move the profession forward and discuss where more effort is needed.

Monitoring Infection Control in the Home

2:25 PM – 3:00 PM

Cynthia Gray Roberts RRT RPFT, Edmond OK

Content Category: CLP

As a home care provider when and how should you monitor infection control in the home? Monitoring infection control in the home is critical for clients/patients, staff, and the health of your business. Infection control monitoring isn't just for hospitals.



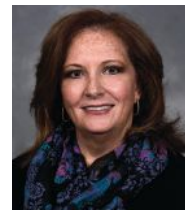
Stephanie Williams



Barbara Phillips



Frank Salvatore Jr



Cynthia Gray Roberts

Wednesday, December 5



Honor Our Military

**ATTEND THE AARC
FLAG FOLDING CEREMONY**

**Thursday, December 6
8:50 AM in the Mandalay Ballroom GH**

Effects of Marijuana on Sleep

3:05 PM – 3:40 PM

Lutana Haan RRT, Boise ID

Content Category: SDS

What do we know in 2018? The speaker will discuss findings on the effects of marijuana on sleep. She will also discuss how adolescents are affected by sleep disturbances and how sleep disorders respond to marijuana use.

PRO/CON: New Modes of MV are the Answer to Better Outcomes

3:05 PM – 4:20 PM

PRO: Robert Kacmarek PhD RRT FAARC, Littleton MA

CON: John Davies MSc RRT FAARC, Cary NC

Content Category: AAC

There is considerable debate regarding pressure versus volume targeted modes of mechanical ventilation. What about the new modes? Can new modes of mechanical ventilation be used to improve patient outcomes? During this session two experts will debate the evidence that supports or refutes the use of new modes.

Continuing Respiratory Care Education (CRCE)

AARC Congress 2018 is approved for all the credit hours you need to maintain your state license, more than 20 hours.

Respiratory Care of a Spinal Cord Injury Patient

3:05 PM – 3:40 PM

Maria Madden BS RRT RRT-ACCS, Baltimore MD

Content Category: AAC

Spinal cord injury can lead to significant respiratory complications such as hypoventilation and atelectasis. The lecture will review the respiratory management of patients with spinal cord injury.

The Millennial Takeover: The Safe Place of Skilled Nursing

3:05 PM – 3:40 PM

Ryan Stiles BS RRT, Gallatin TN

Content Category: CLP

A fresh look at aging and quality of life in the post-acute care ventilator unit specifically evaluating the needs of a younger population.

(Symposium) Bridging the Gaps – Acute to Post-Acute Care

3:05 PM – 5:00 PM

► Understanding Obstacles to Treatment in the Home

3:05 PM – 3:40 PM

Kimberly Wiles BS RRT FAARC, Kittanning PA

Content Category: CLP

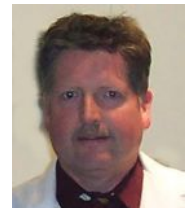
Various limitations exist when discharging patients to home with various equipment modalities. This lecture will discuss obstacles to care and how to identify barriers to care.



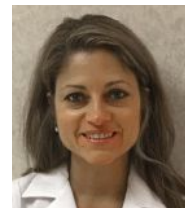
Lutana Haan



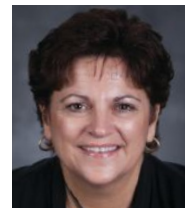
Robert Kacmarek



John Davies



Maria Madden



Kimberly Wiles

► **Accurate Oxygenation — How Does it Affect Readmissions?**

3:45 PM – 4:20 PM

**Mark Mangus Sr RRT CPFT FAARC,
San Antonio TX**

Content Category: CLP

Are your patients oxygenated appropriately? This lecture will discuss the limitations in long term oxygen therapy when provided in the home.

► **Equipment Limitations in the Home for the Ventilator Patient**

4:25 PM – 5:00 PM

Angela King RRT RPFT, Leo IN

Content Category: CLP

Advances in technology have enabled critically ill but stable patients return to their home. This lecture will discuss barriers to care and how to ensure a safe discharge.

Medical Device Cybersecurity Landscape in Health Care

3:05 PM – 3:40 PM

**Marc Schlessinger MBA RRT FACHE,
Plymouth Meeting PA**

Content Category: MGT

With today's connected health care environment medical device cybersecurity can no longer be a secondary thought. It must be a key strategy for every health care organization. Easy access to the hospital network can be achieved through the many connected medical devices. Many health care systems still utilize outdated and unsupported operating systems which pose an additional threat to the network.

OPEN FORUM — Poster Discussions #9

Supported by an unrestricted educational grant from



3:10 PM – 5:05 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

OPEN FORUM — Poster Discussions #10

Supported by an unrestricted educational grant from



3:10 PM – 5:05 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.



Mark Mangus



Angela King



Marc Schlessinger

Wednesday, December 5

ZZZ...? Fatigue, Sleep Deprivation, and Patient Safety

3:45 PM – 4:20 PM

Jennifer Anderson EdD RRT RRT-NPS, Wichita Falls TX

Content Category: SDS

Sleep deprivation can affect the performance of RTs. The amount of impairment that is induced by acute sleep deprivation has consistently been shown to mirror that induced by alcohol. Learn about issues surrounding sleep deprivation that can lead to worsened performance and recommendations to prevent and reduce fatigue. In this interactive lecture we will discuss alertness and performance and the consequences of sleep deprivation.

Micro-Learning: Latest Fad or Emerging Innovation?

3:45 PM – 4:20 PM

Bill Galvin MEd RRT FAARC, Havertown PA

Content Category: EDU

Micro-learning is a relatively new phenomenon in the world of teaching and learning. It has been particularly attractive in the world of training and development where time, ease of access, and change of content are of considerable importance. Does it hold value in the classroom, in clinical education, in staff development and/or patient education? This presentation will provide an overview of the concept, the rationale, and steps in development and use for managers and educators.

Start Early: Lung-Protective Ventilation in the ED

3:45 PM – 4:20 PM

Daniel Rowley MS RRT FAARC, Charlottesville VA

Content Category: AAC

Incorporating lung protective mechanical ventilation strategies into clinical practice

has improved ARDS outcomes, but its associated mortality remains unacceptably high. Emerging evidence suggests that the early application of a lung protective ventilation strategy in the emergency department may reduce ARDS onset or severity.

Immersing Evidence-Based Practice in All Respiratory Services

3:45 PM – 4:20 PM

Teresa Volsko MBA RRT FAARC, Canfield OH

Content Category: MGT

There are many barriers that prevent the use of an evidence-based approach to care to transform our practice. This lecture series will describe the tenets of Evidence-Based Practice (EBP), discuss the barriers and present solutions to transform a culture into one which prepares our workforce, level-loads EBP knowledge in an organization, and strategically infuses EBP into the culture by educating and empowering our current and future workforce.

Meeting the Needs of an Asthma Community

4:25 PM – 5:00 PM

Scott Cerreta BS RRT, Phoenix AZ

Content Category: PTS

The Navajo Nation is home to the largest Indian tribe in the U.S. and sprawls across northeast Arizona, New Mexico, and Utah. National Jewish Health has been awarded an NHLBI grant to develop an Asthma Toolkit Program for the diagnosis and management of childhood asthma within the Navajo Nation where a recent surge of asthma cases have been identified. This lecture will review the collaboration program implemented within an outpatient and inpatient setting.



Jennifer Anderson



Bill Galvin



Daniel Rowley



Teresa Volsko



Scott Cerreta

Transformational Leadership

4:25 PM – 5:00 PM

**Valerie David MHA RRT AE-C,
Smyrna GA**

Content Category: MGT

Leaders who display an authentic and transformational leadership style allow for the recognition of needed change and are capable of guiding change by inspiring followers and creating a sense of commitment. These qualities allow the respiratory care leader to feel both comfortable and confident when engaging in the development of themselves and those around them.

Advancing Your Education, Seeking a Career in Academics, and the Future of Respiratory Care

4:25 PM – 5:00 PM

**Robert Joyner PhD RRT FAARC,
Delmar MD**

Content Category: EDU

Significant frustration can occur when you feel you don't have the voice and authority you deserve. This discussion will include practical reasons to seek out an advanced degree and how it leads to a more satisfying career in the clinical setting and within academics. Why being smart is not enough, even if it should be.

RTs Role in Decreasing Hospital Readmissions

4:25 PM – 5:00 PM

Derrick Orr RRT, Philadelphia PA

Content Category: SDS

This lecture will identify ways to navigate the pathway from identification to treatment and discuss how outcomes are used to drive change and improve patient care.

Pediatric Pearls for Optimal Transition to Home Ventilation

4:25 PM – 5:00 PM

Howie Panitch MD, Philadelphia PA

Content Category: NPS

Although focus is often on the acute ventilatory management of the pediatric patient with respiratory failure, one of the biggest challenges is the transition from acute management to chronic ventilatory care. This presentation will discuss pearls for the optimal transition of the infant or child to home ventilation.

High Flow Nasal Cannula: Not Just Hot Air

4:25 PM – 5:00 PM

**Dean R Hess PhD RRT FAARC,
Danvers MA**

Content Category: AAC

High flow nasal cannula (HFNC) has been shown to be a safe and effective therapy in various clinical situations. This lecture will review the evidence supporting the use of HFNC to improve gas exchange and improve work of breathing.



Valerie David



Robert Joyner



Derrick Orr



Howie Panitch



Dean R Hess



RESPIRATORY PATIENT ADVOCACY SUMMIT

JOIN THE PATIENT ADVOCACY MOVEMENT ATTEND AARC'S RESPIRATORY PATIENT ADVOCACY SUMMIT

December 3, 2018 • Las Vegas, Nevada • Mandalay Bay Convention Center • 11:45 a.m. – 5 p.m.

Help Enact Change for Quality Respiratory Patient Care

Patients with chronic respiratory conditions and caregivers know that it's essential for medical professionals and patients to communicate, share information, and join together to achieve the best in patient care and quality of life.

The AARC Respiratory Patient Advocacy Summit builds partnerships between chronic respiratory patients, caregivers, advocates, physicians, and respiratory therapists. It aligns these groups toward the goal of improving patient care, equipment, and services.

The Summit includes lectures and discussions with top physicians, inviting respiratory therapists and advocates to share their clinical insights and strategies to improve patient care. Guests will also participate in roundtable discussions and connect with influencers in the respiratory industry. **Registration is free. Sign up today!**

Lunch and refreshments will be provided

After registration, you will receive an email notification with additional meeting details. Parking vouchers will be provided. Registration deadline is Monday, November 19.

Who Should Attend the Summit?

- ✓ Patients who have chronic respiratory diseases
- ✓ Patient advocates
- ✓ Caregivers, family, friends of patients
- ✓ Respiratory therapists and physicians

Lectures & Discussions:

Patient Keynotes:

COPD Management: A Patient Perspective – Len Geiger

Pulmonary Hypertension: A Caregiver's Perspective – Steve Van Wormer

National Patient Advocacy Award Presentation – A collaboration between *FACES Foundation* and *AARC* - Sharman Lamka, President & Co-Founder, *The FACES Foundation*

Foundation Roundtable

ARDS Foundation – Ellen Rubin, JD, President

Physician-Patient Alliance for Health and Safety – Michael Wong, JD, Executive Director

Alliance for Patient Access – Susan Hepworth

Cystic Fibrosis Foundation – David Elin, MSW, Director, Policy & Advocacy

Silver sponsors:



Contributing sponsors:



The Summit is held in conjunction with AARC's International Respiratory Congress Dec. 4-7



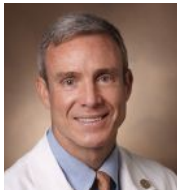
TO REGISTER:

Visit www.aarc.org/patient-summit or contact 972-243-2272

Thursday



45th Donald F Egan Scientific Memorial Lecture



The ABCDEF Bundle and the Role of the Respiratory Therapist
8:00 AM – 8:45 AM

**Wes Ely MD MPH,
Nashville TN**

Content Category: AAC

The ABCDEF Bundle is a major initiative in critical care to improve patient care and speed the ICU and ventilator discontinuation process. A — assess, manage, and prevent pain; B — both spontaneous breathing trials and spontaneous awakening trials; C — choice of analgesia and sedation; D — delirium prevention and treatment; E — early mobility/exercise; and F — family engagement.

Dr. Ely will describe the integration of respiratory therapists into each of these domains to assure collaboration and quality patient care. He will describe how lack of respiratory therapy involvement can doom the implementation to failure. The science behind the bundle will be reviewed and areas of further study revealed.

Sputum Bowl Finals

Sponsored by

Medtronic

Further. Together

TBD

Renee Wunderley BS RRT RRT-NPS | *Presiding*

Student teams from the AARC State Societies compete in the preliminary competitions. The top four teams will face off in the Finals today. Attend the reception from 5:15 pm – 7:30 pm.

Student Symposium for New Professionals

THIS SYMPOSIUM IS NOT ELIGIBLE FOR CRCE

8:35 AM – 12:25 PM

► Message from Your AARC President

8:35 AM – 9:10 AM

**Karen Schell DHSc RRT RRT-NPS
RPFT, Frankfort KS**

The 2019-2020 president of the AARC will meet with students to answer questions and discuss the importance of the role students play in advancing the profession.

► What It Means To Be a Professional

9:15 AM – 9:45 AM

**Dana Evans MHA RRT RRT-NPS,
Chicago IL**

This presentation will focus on preparing the respiratory care student to transition into professional life as a respiratory therapist. The presenter will discuss demonstrating professionalism in student environments (clinical rotations, professional meetings, etc.), applying and interviewing for a job, and maintaining professionalism after graduation.

► Getting That Dream Job

9:50 AM – 10:25 AM

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

This presentation will provide an explanation of the value of marketing and how you can use key marketing principles to position yourself for your dream job. We will also outline techniques to conduct an effective job search along with a brief overview on how to develop your cover letter and resume. The presenter will discuss common mistakes and pitfalls of job seekers, including those that may cost you the position before you are hired.

► Success on the Therapist Multiple Choice Examination

10:30 AM – 11:05 AM

**Bill Galvin MEd RRT FAARC,
Havertown PA**

The presentation will address the factors that make for success in the examination process. It will cover preparatory issues and what you will experience onsite as well as test-taking strategies and techniques. Emphasis will be placed on the new Therapist Multiple-Choice Examination (TMC).

► Success on the Clinical Simulation Examination

11:10 AM – 11:45 AM

Bill Galvin MEd RRT FAARC

This presentation will serve as a sequel to the previous one and will address the factors that make for success on the Clinical Simulation Examination. It will cover such issues as exam content, structure, and unique strategies for progressing through a branching logic type of exam. It will also highlight recent changes in policy.

► Finding Your WHY

11:50 AM – 12:25 PM

Joseph Ariale Jr RRT, Summerville SC

Mandy De Vries RRT, Charleston SC

Come in and join us for a little motivation and the stories of two very different respiratory therapists finding their WHYs through their respiratory educational and career journeys. Finding your WHY or your passion will give you the motivation to get involved and stay involved leading to a very fulfilled and positive respiratory career.



Karen Schell



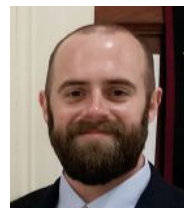
Dana Evans



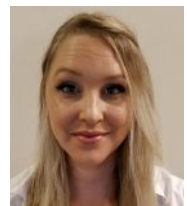
Cheryl Hoerr



Bill Galvin



Joseph Ariale



Mandy De Vries

Flag Folding Ceremony

8:50 AM – 9:20 AM

An AARC tradition like no other, attend the AARC Flag Folding Ceremony and celebrate the rich tradition of the U.S. Military and Armed Forces. RT veterans and active duty respiratory therapists conduct a moving ceremony as we recognize those who serve, those who have served, and those we have lost.



OPEN FORUM® — Editors' Choice

Supported by an unrestricted educational grant from



9:00 AM – 11:30 AM

Presentations of the top abstracts in this year's OPEN FORUM. Researchers and clinicians present significant findings in respiratory care research by giving 8-minute slide presentations, each followed by 5 minutes of questions and discussion. Important — Posters of the Editors' Choice abstracts will be displayed in the Exhibit Hall on Tuesday and Wednesday, Dec 4-5 and in the meeting room on Thursday, Dec 6.

Adult Acute Care Section Meeting

9:55 AM – 10:25 AM



Carl Hinkson MS RRT FAARC | *Presiding*

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.



Rob DiBlasi

OPEN FORUM® — Posters Only #2

Supported by an unrestricted educational grant from



10:30 AM – 1:30 PM

Researchers and clinicians present the results of their work in this Posters Only session. Authors available from 12:00 pm – 1:30 pm for questions and answers. Poster Walk Rounds led by Dean R Hess PhD RRT FAARC and Brady Scott MSc RRT RRT-ACCS FAARC.

Top 5 Respiratory Controversies in the Neonatal ICU

10:30 AM – 11:05 AM

Rob DiBlasi RRT RRT-NPS FAARC,
Shoreline WA

Content Category: NPS

Today's respiratory therapists are challenged when making clinical decisions that could impact clinical outcomes in the neonatal critical care environment. Pertinent topics may include anything from selecting the proper nasal airway interface for noninvasive support to deciding on a new ventilator mode to the location for placing a nebulizer for giving an aerosol treatment to a mechanically ventilated newborn. This interactive lecture will focus on several hot topics related to respiratory care in the NICU.

(Symposium)
**Current Opinions in
Mechanical Ventilation**
10:30 AM – 12:25 PM

► **Understanding Dynamic
Alveolar Physiology to
Minimize VILI**
10:30 AM – 11:05 AM

Gary Nieman BA, Syracuse NY

Content Category: AAC
Mechanical ventilation in ARDS can be a double-edged sword: if set improperly it can cause ventilator-induced lung injury (VILI). In this lecture the dynamic physiology of alveolar inflation and deflation during mechanical ventilation will be reviewed. The pathophysiologic mechanisms of VILI will also be discussed.

► **Physiology-Based Practice**
11:10 AM – 11:45 AM

**Thomas Piraino RRT,
Beamsville Ontario**

Content Category: AAC
Despite the many large studies of mechanical ventilation only a few studies have demonstrated benefit or reduction of unwanted patient outcomes. Understanding, measuring, and monitoring the physiological response to mechanical ventilation is essential for individualizing the delivery of mechanical ventilation. This talk will summarize the concept of individualized mechanical ventilation based on physiology.

► **Evidence-Based Practice**
11:50 AM – 12:25 PM

**Eddy Fan MD PhD,
Toronto Ontario**

Content Category: AAC
Mechanical ventilation is a fundamental aspect of critical care. Evidence-based practice is essential for minimizing the potential harm of mechanical ventilation. This talk will summarize the best evidence available for the practice of mechanical ventilation today.

**Healthy People 2020:
What's an RT Leader To Do?**
10:30 AM – 11:05 AM

**Sara Parker MPH RRT AE-C,
Columbia MO**

Content Category: MGT
The Healthy People Initiative is part of a 10-year plan aimed at improving the health of the American population. The initiative identifies major health topics and develops objectives to target specific areas. The goal is to obtain documented improvement by the end of the 10-year timeline. RT leaders and RT clinicians can play a role in achieving these outcomes with awareness and involvement in the development of the interventions.

**Transforming COPD with
an End to End Solution**
10:30 AM – 11:05 AM

Anil Singh MD, Pittsburgh PA

Content Category: CLP
This lecture will discuss a program that is successful in coordinating acute and post-acute care in the management of COPD.



Gary Nieman



Thomas Piraino



Eddy Fan



Sara Parker

PRO/CON: Post-Op Pulmonary Complications: Ambulation is Enough

10:30 AM – 11:45 AM

PRO: Rich Branson MS RRT FAARC, Beaufort SC

CON: Keith Lamb BS RRT RRT-ACCS, Warrenton VA

Content Category: AAC

Postoperative pulmonary complications are common and associated with considerable morbidity. Several therapies have been proposed to reduce issues such as atelectasis. This debate will evaluate the evidence to support and refute commonly used therapies to reduce postoperative pulmonary complications, including early ambulation.

(Symposium) ATS/ERS Diagnostic Standards

10:30 AM – 12:25 PM

► ERS Technical Standard on Bronchial Challenge Testing

10:30 AM – 11:05 AM

Matthew O'Brien RRT RPFT FAARC, Madison WI

Content Category: PFT

In 2017 the European Respiratory Society published the new technical standard on bronchial challenge. This lecture will review this standard in its use in a pulmonary function laboratory.

► Single-Breath Carbon Monoxide Uptake in the Lung

11:10 AM – 11:45 AM

Jeffrey Haynes RRT RPFT FAARC, Pembroke NH

Content Category: PFT

In 2017 the European Respiratory Society and American Thoracic Society published new standards for single-breath carbon monoxide uptake in the lung. The document describes new calibration and mechanical model requirements and a quality control grading scheme as well as the new acceptability and repeatability criteria for test performance. In addition it emphasizes the use of rapid gas analyzer technology.

► ATS Standards for Pulmonary Function Reporting

11:50 AM – 12:25 PM

Carl Mottram RRT RPFT FAARC, Rochester MN

Content Category: PFT

In December 2017 the ATS published a new standard on the standardization of the PFT report which includes references and grading schemes. This lecture will review the recommendations and the impact on pulmonary function laboratory practice.



Rich Branson



Keith Lamb



Matthew O'Brien



Jeffrey Haynes



Carl Mottram

(Symposium)
**COPD National Action Plan —
How Do We Implement It?**
10:30 AM – 12:25 PM

► **Ethical Challenges in an
Evolving Technical Health
Care World**
10:30 AM – 11:05 AM

**Jason Moury MPH RRT,
Winchendon MA**

Content Category: ETH
This lecture will explore the ethical challenges RTs face in our current connected world. The speaker will discuss what is/isn't acceptable and ways to help respiratory therapists identify potential ethical issues. Three examples of "best practices" will be given that show decisions that have opened the door for discipline. The speaker will also explore the impact that social media and other internet-based forums have on RTs and their workplace.

► **The History and
Importance of the COPD
National Action Plan**
11:10 AM – 11:45 AM

**Stephanie Williams BS RRT,
Nashville TN**

Content Category: CLP
Did you know that the COPD National Action Plan is the first ever blueprint for a unified approach to dealing with the disease? The US Congress requested this plan be developed with input from a broad sample of the COPD community to help those affected by the disease and those who care about reducing its burden.

► **Knowledge and
Empowerment**
11:50 AM – 12:25 PM

Jane Martin BA LRT CRT, Holland MI

Content Category: CLP
Respiratory therapists can influence the impact of the COPD National Action Plan. In this presentation attendees will learn about specific tools they can use to help implement the COPD National Action Plan in their work environment. They will also learn how these resources are available in a variety of forms and levels of interaction for those impacted by COPD, including patients their family members and caregivers.

► **Discontent: The First
Necessity of Progress**
11:10 AM – 11:45 AM

**Thomas Berlin DHSc MS RRT,
Orlando FL**

Content Category: MGT
American health care is at a crossroads in the attempt to reduce cost, eliminate waste, and improve value. Without a clear and relentless focus on enhancing and communicating value to those we serve, our profession may be at risk. Opportunity awaits RTs who can expand their skill set and work to mitigate problems with quality and waste. We will examine the message the US job market is sending and discuss a way forward.

► **Dynamic Dialogue: Excellence
in Patient Communication**
11:10 AM – 11:45 AM

Frederic Seifer MD FCCP, Potsdam NY

Content Category: CLP
Dynamic Dialogue is a methodology for effective engagement. Dynamic Dialogue is used to connect with patients in a way most clinicians can't or won't. It's connecting with patients at their level, figuring out what's important to them, and leveraging it to better manage their chronic disease.



Jason Moury



Stephanie Williams



Jane Martin



Thomas Berlin



Frederic Seifer

(Symposium)
**Congenital Diaphragmatic
Hernia: Management
and Outcomes**

11:10 AM – 12:25 PM

► **Acute Management of
Congenital Diaphragmatic
Hernia**

11:10 AM – 11:45 AM

**Natalie Napolitano MPH RRT FAARC,
Philadelphia PA**

Content Category: NPS

This presentation will include a comprehensive discussion of the key aspects in the management of the neonate with congenital diaphragmatic hernia. An emphasis will be placed on the available data.

► **Outcomes of Infants
with Congenital
Diaphragmatic Hernia**

11:50 AM – 12:25 PM

Howie Panitch MD, Philadelphia PA

Content Category: NPS

What are the short- and long-term outcomes for neonates with congenital diaphragmatic hernia? This international expert will review the available data and offer thoughts for future developments for this challenging clinical condition. Time will be allotted for discussion with the audience.

**Achieving the APEX
Recognition Award:
Not a Sprint but a Marathon**

11:50 AM – 12:25 PM

**Margarete Pierce MS RRT CPFT,
Chadds Ford PA**

Content Category: MGT

The APEX Award defines performance-driven standards demonstrating commitment to excellence in quality, safety, and evidence-based care. APEX recognition organizations require engaged RTs who are actively involved in process improvement, best practices, and a progressive environment that empowers and attracts clinicians. The lecture provides tips to implement changes and prepare your department to achieve APEX recognition status.

**Lung Transplantation
and the RT**

11:50 AM – 12:25 PM

Mark Yoder MD MS FCCP, Chicago IL

Content Category: AAC

This presentation will discuss the policies and regulations addressing lung transplantation and when the chronic pulmonary disease patient may qualify for lung transplantation in addition to pre- and post-lung transplantation patient care.



Natalie Napolitano



Howie Panitch



Margarete Pierce

Exhibit Hall Hours:

Tuesday, Dec. 4, 10:30 am – 4:00 pm
Wednesday, Dec. 5, 9:30 am – 3:00 pm
Thursday, Dec. 6, 9:30 am – 2:00 pm



AARC Congress 2018

M3 — Maximally Medically Managed

11:50 AM – 12:25 PM

Frederic Seifer MD FCCP, Potsdam NY

Content Category: CLP

This topic will cover what it means to be Maximally Medically Managed as a COPD patient. This means following the GOLD guidelines, evaluating secretion clearance capabilities, and identifying things like bronchiectasis which is grossly under-diagnosed by >75% in the US.

OPEN FORUM® — Poster Discussions #10

Supported by an unrestricted educational grant from



12:30 PM – 2:25 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.



The 64th International Respiratory Convention & Exhibition

OPEN FORUM® — Poster Discussions #11

Supported by an unrestricted educational grant from



12:30 PM – 2:25 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

Education Section Meeting

12:45 PM – 1:45 PM



Georgianna Sergakis PhD RRT FAARC / Presiding

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.

Diagnostics Section Meeting

1:15 PM – 1:45 PM



Katrina Hynes MHA RRT RPFT / Presiding

Section members meet to determine their needs and priorities, as well as how to use AARC resources to accomplish them. All Congress attendees, including section non-members, are invited to attend and participate.



Frederic Seifer

(Symposium)

ECMO: When, Who, and How

1:45 PM – 4:20 PM

► Assessment of Oxygenation in Critical Care

1:45 PM – 2:20 PM

Heidi Dalton MD, Scottsdale AZ

Content Category: AAC

Oxygenation Index (OI), PaO₂/FiO₂ (P/F) ratios, and SpO₂/FiO₂ (S/F) ratios are used as clinical indicators of hypoxemia in critical care. This lecture will focus on how these and other values may be used to help screen patients for advanced support modalities.

► This Patient is an ECMO Candidate: REALLY?

2:25 PM – 3:00 PM

Mani Daneshmand MD, Durham NC

Content Category: AAC

ECMO supports heart and lung function when conventional therapies have failed and the risk of death is high. But who should be placed on ECMO? How do we decide that a patient is a good candidate? This lecture will discuss the indications and contraindications of ECMO support with an emphasis on factors that influence the final decision.

► New Extracorporeal Support Devices

3:05 PM – 3:40 PM

Heidi Dalton MD

Content Category: AAC

This lecture will discuss new methods and devices for extracorporeal support that have been recently developed and are on the horizon.

► Novel Approaches to ECMO Cannulation

3:45 PM – 4:20 PM

Mani Daneshmand MD

Content Category: AAC

With the growing acceptance of the importance of ambulation during ECMO support, security of cannula placement is essential. This national expert will review novel cannulation strategies which enable patients, including those cannulated for VA ECMO, to ambulate safely. Thoughts for the future advancements of ECMO technology will be offered.



Heidi Dalton



Mani Daneshmand



Honor Our Military

ATTEND THE AARC
FLAG FOLDING CEREMONY

Thursday, December 6
8:50 AM in the
Mandalay Ballroom GH

Thursday, December 6

PRO/CON: Infants Should Be Extubated to HFNC to Facilitate Successful Extubation

1:45 PM – 3:00 PM

PRO: Rob DiBlasi RRT RRT-NPS FAARC, Shoreline WA

CON: Brad Kuch MHA RRT FAARC, Havertown PA

Content Category: NPS

It is becoming increasingly common for clinicians to extubate infants and children to noninvasive respiratory support with HFNC. Does this practice promote extubation success and is it thus resource wise? Or does this practice prolong unnecessary supportive medical care and waste resources? In a pro/con format these two experts in the field will debate this ongoing controversy. Time will be allocated for open discussion with the audience.

Pulmonary Function Testing of the Obese Patient

1:45 PM – 2:20 PM

Jeffrey Haynes RRT RPFT FAARC, Pembroke NH

Content Category: PFT

This lecture will review the physiologic and technical aspects of performing pulmonary function testing in the obese patient.

(Symposium) Heated High Flow Humidity in Post-Acute: Improving Outcomes

1:45 PM – 3:00 PM

► Why Heated High Flow for Trach and Vent Weaning?

1:45 PM – 2:20 PM

Nancy Nathenson RRT, Lincoln NE

Content Category: CLP

Introduction of heated high flow humidification in the LTACH environment — why and how.

► Vent Days Reduction with Heated High Flow Humidification

2:25 PM – 3:00 PM

Lorraine Cullen MS RRT, Berlin CT

Content Category: CLP

Ventilator weaning rates will become a core metric for LTACHs in the near future. How can LTACHs meet or exceed the national standards? This presentation will look at one LTACHs' ventilator weaning protocol that resulted in a reduction of 4 days on the vent.

Content Categories

AAC — Adult Acute Care
CLP — Clinical Practice
EDU — Education
ETH — Ethics
MGT — Management
NPS — Neonatal/Pediatrics
PFT — Pulmonary Function
PTS — Patient Safety
SDS — Sleep Medicine



Rob DiBlasi



Brad Kuch



Jeffrey Haynes



Nancy Nathenson



Lorraine Cullen

(Symposium) Navigating Group Purchasing Organizations

1:45 PM – 2:20 PM

► GPOs in Value-Based Purchases and What RT Managers Need to Understand

1:45 PM – 2:20 PM

Stephen Walker BHS RRT RCP, Weatherford TX

Content Category: MGT

Many organizations purchase supplies through Group Purchasing Organizations (GPOs). This presentation will provide information about what a GPO is, what a GPO does for your organization, why manufacturers contract through GPOs, and how you can utilize your facility's GPO to help manage your equipment, supplies, and other purchases to ensure quality of care rather than merely cost-cutting.

► Why Do We All Have to Have the Same Stuff? Clinical Preferences

2:25 PM – 3:00 PM

Carl Hinkson MS RRT FAARC, Marysville WA

Content Category: MGT

Has this happened to you: you have a nice ventilator that everyone in your facility is comfortable using, but now you're being told you have to buy a different brand because it is "on contract?" You are not alone. GPOs offer great value but may force everyone to standardize to one product. This presentation will cover differentiating between what is a clinical need versus a clinical preference and how to approach it with your colleagues.

Social Media in Health Care and Asthma Education

1:45 PM – 2:20 PM

Jamie Smith BHS RRT AE-C, Leawood KS

Content Category: CLP

This presentation will describe first-hand experience with starting a social media platform within the hospital system and using social media as a way to educate ourselves and our patient population about asthma and allergies.

How "Present" is the Online Instructor?

1:45 PM – 2:20 PM

Monica Schibig MA RRT RRT-NPS, Columbia MO

Content Category: EDU

Over the past few years there have been several highly publicized reports of institutions that were facing substantial fines, or potential loss of accreditation, because classes defined by the institution as distance education lacked evidence of regular and substantive interaction between instructors and students. This lecture will provide vital information to ensure compliance and avoid accreditation complications.

The Dollars and Sense of Pulmonary Function Testing

2:25 PM – 3:00 PM

Matthew O'Brien RRT RPFT FAARC, Madison WI

Content Category: PFT

Health care reimbursement dollars continue to decline. Health care facilities continue to look for ways to reduce costs. Does your current method of diagnostic testing make sense? This presentation will provoke you to reassess your current lab workflow for potential savings without sacrificing quality.



Stephen Walker



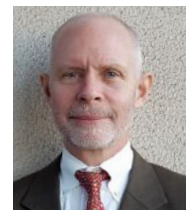
Carl Hinkson



Jamie Smith



Monica Schibig



Matthew O'Brien

(Symposium)
**Paving the Path to
a Bachelor's Degree**

2:25 PM – 4:20 PM

► **Curricular Considerations**

2:25 PM – 3:00 PM

Tina Siddon MS RRT, Madisonville KY

Content Category: EDU

This presentation will describe interventions programs can implement prior to students starting their degree program.

► **Helping Students Explore Opportunities**

3:05 PM – 3:40 PM

Kyle Mahan MSM RRT, Louisville KY

Content Category: EDU

This presentation will describe low budget methods of making students aware of options to transfer to bachelor's degree RT programs.

► **Resources Available to Help**

3:45 PM – 4:20 PM

**Diane Oldfather MHEd RRT FAARC,
Bland MO**

Content Category: EDU

This presentation will describe tools that are available to promote career pathways.

Continuing Respiratory Care Education (CRCE)

AARC Congress 2018 is approved for all the credit hours you need to maintain your state license, more than 20 hours.

**Home Asthma Education:
Can I Get Reimbursed for That?**

2:25 PM – 3:00 PM

**Sara Parker MPH RRT AE-C,
Columbia MO**

Content Category: CLP

The economic burden of asthma in the United States is significant. Asthma education improves asthma self-management and asthma control. In-home asthma education programs can decrease the number of hospitalizations and have a significant return on investment if they are developed appropriately. There is currently a gap in this area of asthma management but several states are beginning to utilize AE-Cs for this service.

(Symposium)
**You're in the 25th Percentile
— Now What?**

3:05 PM – 4:20 PM

► **Pitfalls and Complexities
of Benchmarking**

3:05 PM – 3:40 PM

**Richard Ford BS RRT FAARC,
Poway CA**

Content Category: MGT

Every department strives to be the best, but what do you do when your administrator informs you that your benchmarking data is way "out of line" with your compare group and it looks like significant reductions in staff must be made? We will take a closer look at why benchmarking data — in even the best performing hospitals — can indicate productivity is poor and look at strategies to level the playing field and improve performance.



Tina Siddon



Kyle Mahan



Diane Oldfather



Sara Parker



Richard Ford

► **AARC Benchmarking: Getting the Most from Your Metrics**

3:45 PM – 4:20 PM

Richard Ford BS RRT FAARC

Content Category: MGT

AARC Benchmarking has been redesigned. This presentation will highlight the key features of AARC Benchmarking, the process of data entry, and an overview of reports currently available.

The HME RT: Evolve or Disappear

3:05 PM – 3:40 PM

Zach Gantt RRT, Livingston TN

Content Category: CLP

Innovative home care providers have found new ways to create revenue streams, clinical programs, and partnerships. These services and programs are the exception instead of the norm. This lecture will review these successful models and discuss how to get paid for respiratory services in post-acute care.

Delirium in the Critical Care Setting: Reality or Dream?

3:05 PM – 3:40 PM

Sapna Kudchadkar MD PhD, Baltimore MD

Content Category: NPS

An increasing quantity of literature supports both the existence and adverse effects of delirium in the pediatric population. An international expert in this important field will review the available data, discuss tools to identify delirium in the pediatric ICU, and explore strategies for treatment.

Clinical Application of Impulse Oscillometry

3:05 PM – 3:40 PM

Michael Morris MD, San Antonio TX

Content Category: PFT

This presentation will discuss how impulse oscillometry can be used in the pulmonary function lab to supplement spirometry and assist in the diagnosis of asthma and other respiratory disorders.

(Symposium) The Immunological Basis of Asthma

3:05 PM – 4:20 PM

► **The Immunological Basis for Asthma**

3:05 PM – 3:40 PM

Kathleen Ververeli MD, Allentown PA

Content Category: CLP

This lecture will describe the various immune pathways that lead to the development and progression of asthma with a focus on potential treatment targets.

► **Management of the Immunological Basis of Asthma**

3:45 PM – 4:20 PM

Kathleen Ververeli MD

Content Category: CLP

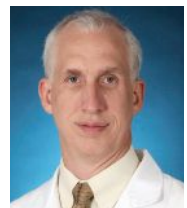
This lecture will detail the currently approved monoclonal antibodies and future ones with focus on their specific mechanism of action, efficacy, safety, and practical use in clinical settings.



Zach Gantt



Sapna Kudchadkar



Michael Morris



Kathleen Ververeli

AARC Congress 2018

Professional Use of Social Media

3:05 PM – 3:40 PM

Mona Shattell PhD RN, Chicago IL

Content Category: MGT

Considering issues such as HIPAA and hospital liability, social media may feel like a minefield to health care providers. There are many resources regarding what not to post; however it is equally important to know how proper use of social media can benefit the health care provider, the profession, and the community.

OPEN FORUM® — Poster Discussions #13

Supported by an unrestricted educational grant from



3:10 PM – 5:05 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

OPEN FORUM® — Poster Discussions #14

Supported by an unrestricted educational grant from



3:10 PM – 5:05 PM

Researchers and clinicians present research results on bread-and-butter issues in respiratory care. The audience and authors review the posters during the first part of the session. A brief oral presentation (no slides) and audience questions and discussion allow presenters to expand on the work featured on the posters.

Emergency Preparedness in the Home: Is Your Team Ready?

3:45 PM – 4:20 PM

Cynthia Gray Roberts RRT RPFT, Edmond OK

Content Category: CLP

Preparing for the emergency you hope never comes is essential to the safety of your staff and clients/patients. The past years have presented emergencies that were thought to be impossible. Natural emergencies and manmade are something you must be prepared to deal with. Are you ready?



Mona Shattell



Cynthia Gray Roberts



Photo Courtesy of Las Vegas Visitor Center

(Symposium)
**Hot Topics in
Pulmonary Diagnostics**
3:45 PM – 5:00 PM

► **An Interpretation of
Fractional Exhaled Nitric Oxide
(FENO) Levels for Clinical
Applications**
3:45 PM – 4:20 PM

**Katrina Hynes MHA RRT RPFT,
Rochester MN**

Content Category: PFT
In 2013 the American Thoracic Society published an official clinical practice guideline describing the clinical utility of FENO testing and interpretation of the data produced. This lecture will review this guideline and its use in the clinical setting.

► **A "Gap" Analysis**
4:25 PM – 5:00 PM

**Carl Mottram RRT RPFT FAARC,
Rochester MN**

Content Category: PFT
Clinical practice guidelines and technical statements are necessary to ensure patient data is produced in standardized fashions and according to identified medical best practices. At times the written language can be discordant with how clinicians conduct the test. This presentation will identify the "gaps" in the newly published documents and their impact on patient care.

(Symposium)
**Noninvasive Gas Exchange:
As Good As an Arterial Line?**
3:45 PM – 5:00 PM

► **Noninvasive CO₂ Assessment
in the Neo-Peds ICU Setting**
3:45 PM – 4:20 PM

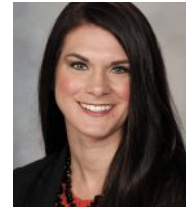
**Craig Smallwood PhD RRT,
Jamaica Plain MA**

Content Category: NPS
End-tidal CO₂ monitoring is becoming a standard of clinical care. Increasingly mechanical ventilators incorporate carbon dioxide monitoring permitting breath-by-breath measurements and waveform analysis as well as trending of the key parameters. This presentation will discuss the relevant technology, physiologic limitations, and best practices of capnography during mechanical ventilation.

► **Noninvasive Monitoring of
Oxygenation in the Neo-Peds
ICU Setting**
4:25 PM – 5:00 PM

**Craig Wheeler MS RRT RRT-NPS,
Boxford MA**

Content Category: NPS
The Oxygenation Index and PaO₂/FiO₂ ratio are commonly used metrics to assess pulmonary dysfunction; however both values require an arterial blood gas sample to calculate. This presentation will discuss various noninvasive methods for assessing the severity of respiratory failure. Benefits, limitations, and best practices of noninvasive monitoring of oxygenation will be explored.



Katrina Hynes



Carl Mottram



Craig Smallwood



Craig Wheeler

(Symposium)
**Strategies to Succeed
in Respiratory Care**

3:45 PM – 5:00 PM

► **Words of Wisdom:
Medical Director's Perspective**

3:45 PM – 4:20 PM

Ira Cheifetz MD FAARC, Durham NC

Content Category: NPS

New to neonatal-pediatric respiratory care? Changing roles within the respiratory care field? This presentation will offer thoughts and suggestions for success from a senior medical director's perspective. Open discussion with the audience will be encouraged.

► **Words of Wisdom:
Recent Grad's Perspective**

4:25 PM – 5:00 PM

Camille Stover RRT, Boise ID

Content Category: NPS

New to neonatal-pediatric respiratory care? Changing roles within the respiratory care field? This presentation will offer thoughts and suggestions for success from a recent grad's perspective. Open discussion with the audience will be encouraged.

**What the C-Suite Expects
of RT Leaders to Demonstrate
Their Value and the Value of
Their Respiratory Care Services**

4:25 PM – 5:00 PM

**Anthony Baird DSc MHA RRT,
El Paso TX**

Content Category: MGT

The presentation will outline developmental and growth capabilities for RT Managers and RT clinicians using our intrinsic global education and positioning as the platform for this development and growth. Discussion will include current and future challenges to health care in general and how RT leaders must play a major role. This presentation is delivered by a former RT who has made the leap to the C-Suite and will share his perspectives on how we are viewed by executives and what we must do to demonstrate, document, and communicate our value.

**Maintaining Skin Integrity
during Noninvasive Ventilation**

4:25 PM – 5:00 PM

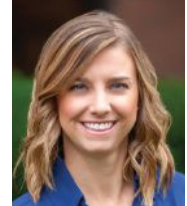
**Kenneth Miller MSRT MEd RRT,
Bath PA**

Content Category: AAC

The benefits of noninvasive ventilation are well documented as are associated complications. Facial skin breakdown is a well-known complication that should be addressed. This lecture describes risk factors associated with facial skin breakdown and a multi-disciplinary team approach to reduce it in the acute care environment.



Ira Cheifetz



Camille Stover



Anthony Baird



Kenneth Miller

RESPIRATORY CARE

OPEN FORUM® Symposia
sponsored by



Clinicians present the results of their scientific studies. Abstracts with a similar focus are clustered into a symposium to encourage discussions and interactions among investigators and observers; posters expand the information presented. 14 OPEN FORUM Symposia will be presented during the 3 ½ days of AARC Congress 2018.

A Graceful Exit: An End-of-Life Course

4:25 PM – 5:00 PM

**Monica Schibig MA RRT RRT-NPS,
Columbia MO**

Content Category: EDU

It can be challenging to incorporate important information regarding end-of-life care into the already packed RT curriculum. This lecture will present a self-study, online, eight module based approach that allows for the flexibility of including modules at any point in time during a student's matriculation through the program.

Staying Safe during Patient Care

4:25 PM – 5:00 PM

Mona Shattell PhD RN, Chicago IL

Content Category: PTS

Health care providers may experience emotionally charged situations when providing patient care. This presentation

will explore various situations the RT may experience and identify appropriate strategies to either avoid, manage, or de-escalate these situations.

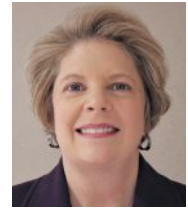
Ethics and the RT: Err on the Side of...

4:25 PM – 5:00 PM

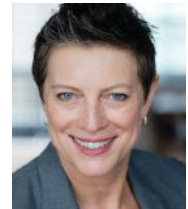
**Stephanie Williams BS RRT,
Nashville TN**

Content Category: ETH

As medical professionals respiratory therapists are held to a high ethical standard. You may think you know the right thing to do in a variety of situations, but are you familiar with what the AARC Code of Ethics says? How do those standards play out in real life? This lecture will explore the code of ethics and examine real world events and the decisions that were made — both positive and negative.



Monica Schibig



Mona Shattell



Stephanie Williams

WIN PRIZES with the AARC Passport Game!

★★★★★

Download the AARC Mobile App to play the AARC Passport Game during Congress 2018. Collect points to win by posting pictures, scanning QR codes, evaluating sessions and more. Winners will be announced at the closing ceremony. Play for a chance to win a Grand Prize!

To play:

- » Go to EVENTS within the AARC app
- » Find the MORE tab
- » Select AARC PASSPORT GAME
- » Start earning points to win!

Friday



34th Phil Kittredge Memorial Lecture

Journey to Zero Harm — Developing a Culture of Safety

8:00 AM – 8:50 AM

**Michael Anderson MD MBA,
San Francisco CA**

Content Category: PTS

Can we be successful in the elimination of nosocomial patient harm? An international expert in patient safety will discuss the journey to zero harm. Strategies that can be employed in all medical facilities to advance a culture of safety will be discussed.

Searching for Florence: Respiratory Care Needs a “Nightingale”

9:15 AM – 9:50 AM

**Mike Hess BS RRT RPFT,
Kalamazoo MI**

Content Category: MGT

Nurses have Florence Nightingale and physicians have Hippocrates. These figures helped define their professions and serve as embodiments of their roles to this day. But respiratory therapy does not have a similar archetype. Does this mean we lack identity? Does this absence make it more difficult to raise our profile in the public eye? If so how do we identify and develop our very own “Nightingale?”



Michael Anderson



Mike Hess

RESPIRATORY CARE

Journal Symposium Putting a Paper Together

9:15 am – 12:30 pm

► Using a Literature Search To Define a Research Question

9:15 AM – 9:50 AM

**Dean R Hess PhD RRT FAARC,
Danvers MA**

Content Category: CLP

Describe methods for searching and reviewing the literature to help define what is known, and how to ask a research question.

► Data Management and Data Analysis

9:55 AM – 10:30 AM

**Rob Chatburn MHHS RRT FAARC,
Cleveland OH**

Content Category: CLP

Determining how many subjects to study is always a challenge. A power analysis can be helpful but requires some statistical understanding. When do you involve a statistician? What are the rules for data management and analysis?

► IRB, IACUCs, and NCTs — Important Rules and Regs

10:35 AM – 11:10 AM

**Rich Branson MS RRT FAARC,
Beaufort SC**

Content Category: CLP

A discussion of requirements for Institutional Review Board approval, Institutional Animal Care and Use Committees, and registration with the national clinical trials web site.

What requirements must be met? How can this affect your papers suitability for publication?

► Methodology — Prospective and Retrospective Trials

11:15 AM – 11:50 AM

**Rich Kallet MS RRT FAARC,
San Francisco CA**

Content Category: CLP

The research question should lead to an appropriate methodology. The use of retrospective data is popular as it evaluates existing data. Historical controls are also popular but have many confounders. Prospective studies allow for better control of confounders but are more expensive and typically require IRB approval. Research based on quality improvement has also become popular but has limitations. This talk will review these issues.

► How to Discuss the Findings

11:55 AM – 12:30 PM

Rich Branson MS RRT FAARC

Content Category: CLP

Research doesn't prove anything. Research provides data upon which a question can be answered with a degree of certainty (or probability). Presenting your findings is an important part of the publishing process and requires interpretation of the data comparison to the existing literature and acknowledgment of limitations.



Dean R Hess



Rob Chatburn



Rich Branson



Rich Kallet

(Symposium)
Innovations in Simulation
9:15 AM – 11:10 AM

► **Using Simulation to Achieve Outcomes**
9:15 AM – 9:50 AM

Julia Lawrence MS RRT RRT-NPS, Houston TX

Content Category: EDU

In this lecture the learner will experience how to use simulation to achieve patient outcomes and understand different ways simulation can be used to improve performance and patient safety.

► **How to Train When Performance Matters — RTs and RCDP**
9:55 AM – 10:30 AM

Julianne Perretta MEd RRT RRT-NPS, Eldersburg MD

Content Category: EDU

Rapid-Cycle Deliberate Practice (RCDP) is an innovative simulation training method incorporating high-fidelity training with rapid directed debriefing and multiple scenario replays. Debriefing is focused on diagnosing performance deficiencies using objective data to direct corrective actions and giving participants solutions to provide faster, safer, and better coordinated patient care.

► **Just-in-Time Training: Simulation Right When It Counts**
10:35 AM – 11:10 AM

Shannon Poling MEd RRT CHSE, Baltimore MD

Content Category: EDU

Annual training is a luxury many institutions can no longer afford. Even when possible, the timing of this type of "one and done" training frequently does not align with when low-volume high-risk time sensitive skills are needed. This presentation will describe several models of designing and implementing training that can be used "just-in-time" increasing staff confidence and competence and improving patient safety.

Gender Differences in Asthma Severity
9:15 AM – 9:50 AM

Joe Zein MD, Mayfield Heights OH

Content Category: AAC

Asthma is more prevalent in boys before puberty. However, after puberty it becomes more severe and prevalent in women. Asthma severity fluctuates across the lifespan in women. It changes during the menstrual cycle and during pregnancy and menopause. It is also influenced by oral contraceptives and hormone replacement therapy. This lecture discusses the approach to asthma management in women.



Julia Lawrence



Julianne Perretta



Joe Zein

Evidence-Based Management Strategies for Bronchiolitis

9:15 AM – 9:50 AM

**Dana Evans MHA RRT RRT-NPS,
Chicago IL**

Content Category: NPS

Bronchiolitis is one of the most common reasons for an infant to present for medical care; however, clinical practice can be variable and is not always evidence-based. This presentation will review the current medical literature and offer an evidence-based approach to the management of the infant with bronchiolitis.



PRO/CON: Driving Pressures are Superior to Tidal Volumes in ARDS

9:15 AM – 10:30 AM

**PRO: Robert Kacmarek PhD RRT
FAARC, Littleton MA**

**CON: Neil R MacIntyre MD FAARC,
Durham NC**

Content Category: AAC

Current guidelines suggest that tidal volume set to ideal body weight (IBW) of the patient is the right thing to do in the setting of ARDS. However, some data has emerged that lungs still undergo significant stress and strain even when these guidelines are used. The experts in this pro/con debate will discuss the utility of driving pressure as a way to protect the lungs.

Surfactant Administration: Beyond the Traditional Approaches

9:55 AM – 10:30 AM

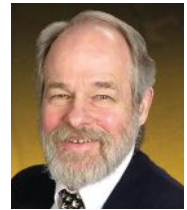
**Shari Toomey MBA RRT RRT-NPS,
Hardy VA**

Content Category: NPS

Surfactant administration in the neonate is standard practice. Alternative noninvasive administration techniques have been developed with the goal of minimizing potential damage caused by mechanical ventilation during surfactant administration. This lecture will explore alternative methods of surfactant delivery and discuss potential benefits.



Dana Evans



Robert Kacmarek



Neil R MacIntyre



Shari Toomey

AARC Congress 2018

(Symposium)
Respiratory Care in Trauma
9:55 AM – 11:10 AM

► **From the ED to the ICU:
Mechanical Ventilation
in Trauma**
9:55 AM – 10:30 AM

**Carl Hinkson MS RRT FAARC,
Marysville WA**

Content Category: AAC

This presentation will cover ventilator management for the trauma patient from the emergency room to the intensive care unit. Unique strategies related to special injuries will also be covered.

► **When It All Goes Wrong:
Rescue Strategies in Trauma**
10:35 AM – 11:10 AM

**Keith Lamb BS RRT RRT-ACCS,
Warrenton VA**

Content Category: AAC

During this lecture the presenter will cover special rescue strategies for the trauma patient that does not respond to conventional measures. The presenter will also discuss the emerging role of ECMO in the trauma population.

**Leadership Lessons
in Trying Times**
9:55 AM – 10:30 AM

Michael Anderson MD RRT, Oxford PA

Content Category: MGT

Balancing the multiple competing interests of a healthcare organization is becoming increasingly challenging given the rapidly changing healthcare field and increasing financial pressures. This presentation will provide leadership lessons from the range of perspectives from bedside clinicians to hospital president.

**High Flow Nasal Cannula:
Where Are the Data?**
10:35 AM – 11:10 AM

Joel Brown BS RRT FAARC, Oxford PA

Content Category: NPS

The use of high flow nasal cannula in the neonatal-pediatric population continues to grow at a near exponential rate. But where are the data? This presentation will review the available data and offer a comprehensive evidence-based approach to the application of HFNC in infants and children.

**The 4 Rs Every Manager Needs
to Know to Create and Manage
a Successful Professional
Ladder Program**
10:35 AM – 11:10 AM

**Lori Green BSRT RRT RRT-NPS,
Herriman UT**

Content Category: MGT

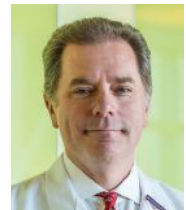
The 4 Rs are: Recruit, Recognize, Reward, and Retain your employees. A successful professional ladder program at the University of Utah Hospital is outlined. The program encourages further career development, education, credentialing, and retention of staff. In addition, this program also increases retention of highly skilled employees, improves quality outcomes, and raises the staff to a higher level of clinical practice.



Carl Hinkson



Keith Lamb



Michael Anderson



Joel Brown



Lori Green

Hospice and Palliative Care: What's the Difference?

10:35 AM – 11:10 AM

Shawna Strickland PhD RRT FAARC, Irving TX

Content Category: *ETH*

Palliative care and hospice are frequently confused as the same component of care. In reality these two care options are independent of each other. This presentation will compare and contrast the elements of palliative care and hospice as well as discuss the RT's role in both.

Disclosure of Faculty Conflict of Interest

- The AARC remains strongly committed to providing the best available evidence-based clinical information to participants of this educational activity and requires an open disclosure of any potential conflict of interest identified by our faculty members.
- It is not the intent of the AARC to eliminate all situations of potential conflict of interest, but rather to enable those who are working with the AARC to recognize situations that may be subject to questions by others.
- All disclosed conflicts of interest are reviewed by the AARC Program Committee to ensure that such situations are properly evaluated and, if necessary, resolved.
- The AARC educational standards pertaining to conflict of interest are intended to maintain the professional autonomy of the clinical experts, which is essential in promoting a balanced presentation of science.
- Through our review process, all AARC CRCE activities are ensured of independent, objective, scientifically balanced presentations of information.
- Disclosure for all presenters will be acknowledged in the on-site final program.

The Future is Here — Pediatric Innovation

11:15 AM – 11:50 AM

Kathleen Deakins RRT RRT-NPS, Cleveland OH

Content Category: *NPS*

Pediatric Innovation is an established program designed to incorporate respiratory therapists in improving clinical processes and designing products that improve bedside clinical care. This presentation will produce a comprehensive review of this novel program with an emphasis on respiratory care.

Agency Update

11:15 AM – 12:30 PM

Karen Schell DHSc RRT RRT-NPS RPFT/AARC President

Michael Amato MBA/ARCF Chair

Katherine Fedor MBA RRT CPFT/NBRC President

Allen Gustin Jr MD FCCP/CoARC President

The leadership of the AARC, ARCF, CoARC, and NBRC will present the most updated information affecting the profession, research, accreditation, and credentialing. This is a must-attend session in your agenda!



Shawna Strickland



Kathleen Deakins



Karen Schell



Michael Amato



Katherine Fedor



Allen Gustin

Friday, December 7

Don't Block It Out: Using Feedback to Advance Your Career

11:15 AM – 11:50 AM

**Dana Evans MHA RRT RRT-NPS,
Chicago IL**

Content Category: MGT

Bypassing feedback, even when it seems unfair, can bring your career growth to an immediate halt. This presentation will discuss ways you can accelerate your career by listening to and understanding feedback.

(Symposium) Ventilator Waveforms: Assessment and Decision Making

11:15 AM – 12:30 PM

► Ventilator Waveforms: Fundamental Concepts

11:15 AM – 11:50 AM

**Ruben Restrepo MD RRT FAARC,
Boerne TX**

Content Category: AAC

Recognizing how ventilator waveforms are displayed is critical to understand patient-ventilator interactions and to optimize the management of patients undergoing invasive mechanical ventilation. This presentation is designed to explain the foundational concepts behind every graphic displayed on the ventilator screen.

► Using Ventilator Waveforms to Support Clinical Decisions

11:55 AM – 12:30 PM

John Davies MSc RRT FAARC, Cary NC

Content Category: AAC

Ventilator waveforms can be used to detect and identify many situations that may require actions by the respiratory care

clinician. This presentation will include discussion and case-based examples of how ventilator waveforms can drive decisions at the bedside.

Competency in the Affective Domain

11:15 AM – 11:50 AM

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

Content Category: EDU

Clinical educators, managers, and program faculty all have a need to assure students and staff have appropriate affective behaviors and professional behaviors. This presentation is designed to help participants develop defensible affective domain assessments that will help ensure the delivery of quality respiratory care.

All Clear! Pediatric Airway Clearance

11:55 AM – 12:30 PM

**Katina Griffith BHS RRT,
Louisville KY**

Content Category: NPS

An evidence-based approach, this presentation will discuss the various modalities for airway clearance in the pediatric critical care environment. The discussion will include thoughts regarding the utilization of airway clearance scoring tools and therapist driven-care management recommendations.



Dana Evans



Ruben Restrepo



John Davies



Sarah Varekojis



Katina Griffith

Nuts and Bolts of Clinical Education Development

11:55 AM – 12:30 PM

**Shawna Murray MEd RRT,
Taylorsville UT**

Content Category: EDU

New equipment process and procedures require staff education. Learn the nuts and bolts of clinical education development including defining obtainable learning objectives, developing criteria specific to the learning objectives, and then measuring success. Make the most of education dollars by making the most of effective staff education!

Respiratory Therapy is Leading the Advanced Care Planning Project in This System: Learn How You Can Too!

11:55 AM – 12:30 PM

**Kim Bennion MHS RRT CHC,
Salt Lake City UT**

Content Category: MGT

Follow the presenter as she shares how Respiratory Care Clinical Services was selected to lead her corporation's Advanced Care Planning integration process. She will share how to uniquely position your service line to be the natural experts and leaders for such high-level projects and will share tools to be successful.



Shawna Murray



Kim Bennion

Closing Ceremony

12:45 PM – 2:15 PM

To Be Announced

RESPIRATORY CARE

OPEN FORUM® Symposia sponsored by



Researches and clinicians present finding of studies on aerosol therapy, mechanical ventilation, neonatal and pediatric care, education, management, and every practice mode in our profession.

Accepted abstracts will be presented in one of 3 formats:

Editors' Choice

**Tuesday and Wednesday
Dec 4–5**

Display of Editors' Choice posters with top 10 abstracts in 2018.

**Thursday
Dec 6**

Ten-minute slide presentations with slides by authors of Editors' Choice, each followed by 10-minute period of audience questions and discussion.

Poster Discussions

**Tuesday – Thursday
Dec 4–6**

Poster sessions grouped by topics. A brief oral presentation (no slides) and questions/discussion allow presenters to expand the work featured on the posters.

Posters Only

**Wednesday and Thursday
Dec 5–6**

Posters presented in sessions grouped by category, different every day.

AARC Congress 2018

Exhibitors as of 7/27/18

A

AARC
Aerogen
AG Industries - Filtration Group
Airgas Healthcare
Airon Corporation
AIT Therapeutics, Inc.
Allergy & Asthma Network
Alpha-1 Foundation
Analytical Industries, Inc
ARC Medical Inc
Aureus Medical Group

B

B&B Medical Technologies
Baitella AG
Bay Corporation
Bio-Med Devices Inc.
Biovo Technologies
(Formerly Airway Medix)
BJC Healthcare
Boehringer Ingelheim
Pharmaceuticals, Inc.
Breathe Technologies, Inc.
Bunnell Incorporated

C

Chiesi USA, Inc.
Circassia Pharmaceuticals Inc
Coalition for Baccalaureate and
Graduate Respiratory Therapy
Education (CoBGRTE)
Commission on Accreditation
For Respiratory Care (CoARC)
ConMed
Cross Country Allied
(formerly MSN Allied)

D

D R Burton
Dale Medical Products Inc.
 Draeger Inc.

E

Electromed, Inc.
Elsevier
Endoclear LLC
EspriGas

F

Fisher & Paykel Healthcare Inc
Flexicare Inc.
FloSure Technologies' LLC

G

Gaumard Scientific
GE Healthcare
GEICO
Genentech
Genstar Technologies Co, Inc.
(Gentec)
Getinge
Goldstein & Associates Inc
Grand Canyon University
GVS North America

H

Halyard Health
Hamilton Medical Inc
Hill-Rom
Hollister Incorporated

I

IMT Analytics AG
(formerly IMTmedical)
IngMar Medical Ltd
Inovytec Medical Solutions Ltd.
Instrumentation Industries Inc
Instrumentation Laboratory
International Biomedical
International Biophysics
Corporation
Intersurgical, Inc

J

Jones & Bartlett Learning

K

Kettering National Seminars

L

Lambda Beta Society
Lee Memorial Health Systems

M

Mallinckrodt Pharmaceuticals
MARPAC, Inc.
Masimo
Maxtec
Medline Industries Inc
Medtronic
Mercury Medical
Methapharm
MGC Diagnostics
Mindray
MIR - Medical International
Research
Monaghan Medical Corporation
Morgan Scientific
Mylan Inc.

N

National Board For Respiratory
Care (NBRC)
nnd Medical Technologies
Neotech Products LLC
Nephron Pharmaceuticals
NEVAP
Nova Biomedical

P

Passy-Muir Inc
Percussionaire Corp
Perma Pure
Philips Healthcare
Pima Medical Institute
Praxair Healthcare Services
Precision Medical, Inc.
Pulmodyne
Pulmonary Fibrosis Foundation

R

Radiometer America Inc.
ResMed
Respiralogics
RespirTech
RT/Sleep Review

S

Salter Labs
Seoil Pacific Corp.
Shinano Kenshi Corporation
Siemens Healthineers
Smiths Medical
SoClean Inc.
SunMed
Sunovion Pharmaceuticals

T

Teleflex
The University of Chicago Medicine
TRACOE medical GmbH
Trajecsys Corporation
Tri-anim Health Services
TSI, Inc.

U

UCLA Health
University of Virginia Health System

V

VapoTherm, Inc.
Venner Medical International
Ventec Life Systems
Ventisim
VibraPEP
Vyair Medical

Z

ZOLL Medical Corporation

Registration and Fees

REGISTRATION FEES

Payment of appropriate 4 Days fee entitles registrant to attend all Congress 2018 official lectures, activities and social events December 4–7. Expenses for hotel, parking, meals and all other incidentals are not included and are the responsibility of the attendee.

| Congress (4 Days) | Through Oct 8 | After Oct 8 And On-site |
|---------------------|---------------|----------------------------|
| AARC Member | \$430 | \$485 |
| AARC Senior Member | \$110 | \$125 |
| AARC Student Member | \$45** | \$80** |
| Non-member | \$600* | \$625* |
| Non-member Student | \$60*** | \$100*** |
| Guest | \$75** | \$75** |

*You may become an AARC Member prior to registering (www.aarc.org). If you opt to pay the non-member Congress 4 days fee, you are entitled to a complimentary 12-month AARC membership. Memberships included in the non-member rate will be activated within 30 days after Congress 2018.

| Congress Daily Fees (Must register on-site) | Tuesday or Wednesday or Thursday | Friday |
|--|--|---------------|
| AARC Member | \$235 | \$175 |
| AARC Senior Member | \$60 | \$40 |
| AARC Student Member | \$45** | \$35** |
| Non-member | \$360 | \$275 |
| Non-Member Student | \$60*** | \$50*** |
| Guest | Not Available | Not Available |

**Students and guests do not earn CRCE credit.

***Non-member students must provide proof of current enrollment (e.g. student I.D. or transcript). Students do not earn CRCE credits.

Active Duty Military

We have a special offer for all health care professionals, not just respiratory therapists, on active duty in all branches of the US armed forces, as well as military reservists recalled to active duty. A valid military email address is required. Go to <http://tinyurl.com/registration-aarc-congress2018>.

Congress Day Tripper Package

A cost-saving group rate is available for AARC members and non-members: four 1-day pre-paid vouchers for \$700. See page 89 for complete details.

Terms & Conditions

PAYMENT

By credit card: American Express, MasterCard, and VISA are the only credit cards accepted.

An email acknowledgement will be sent following the transaction confirming payment.

By check: Registration is NOT complete until check payment has been received. At the conclusion of the registration process, an email confirmation will be sent highlighting the details of your purchase. This email will double as your "invoice" should you need to submit documentation for the payment of your registration.

Students: Non-Member students must provide valid, current student identification (e.g. student I.D. or transcript) during registration or higher registration fees will apply.

Cancellation Protection: Congress 2018 cancellation protection may be purchased for \$37 at the time of registration only. Those purchasing this option may cancel for any reason and receive a 100% refund. Protection covers the total amount paid for AARC Congress 2018 registration fees, purchased pre-courses and/or meeting add-ons (e.g. drink tickets, Gold/Platinum/VIP Passes, etc.). Cancellation protection is not available for students. Registration and cancellation protection must be purchased together.

Cancellation: A written cancellation and refund request is required via e-mail. Emails must be dated no later than Sunday, December 2, 2018 at 11:59 pm. No refund requests will be accepted after that date. Refunds will be processed after the meeting. Send request to aarc@xpressreg.net.

Unless cancellation protection is purchased, refunds will be equal to the total amount paid minus a \$200 administrative fee. Cancellations by students will receive a refund minus a \$25 administrative fee. Fees will not be refunded for no-shows.

Substitution: Registration for those unable to attend may NOT be applied to a future year's meeting. Registration transfers are permitted with a paid administrative fee of \$35. If the substitute is not an AARC member, payment of the difference between the member and non-member fees will also be required. Substitution requests must be submitted in writing by Monday, November 26, 2018 and sent via email to aarc@xpressreg.net.

Badge Replacement: If an attendee misplaces or loses a badge once it is printed onsite, the registered individual must pay \$25 to get a replacement badge.

Your Likeness & Personal Information: The AARC plans to take photographs and video, and reproduce them in educational, news or promotional material, whether in print, electronic or other media, including the AARC website. By participating in

AARC Congress 2018 you grant the right to use your name or voice for such purposes to the AARC. All content becomes the property of the AARC. Content may be displayed, distributed or used by AARC for any association-related purpose.

AARC offers exhibitors the option to use lead retrieval technology. Information shared through that technology includes basic contact information and limited demographic information for each attendee. This information is shared by way of the exhibitor scanning an individual's badge with the individual's consent in the confines of the exhibitor's booth in the Exhibit Hall. Agreeing to have your badge scanned by an exhibitor is providing consent for this information to be shared with that exhibitor.

Exhibitor communications may be sent to those attendees who "opt in" to receive them. If you "opt out", you will be excluded from these communications. All exhibitor communications will be sent to you through a 3rd party email vendor. Your email address will **NEVER** be shared with any exhibitor unless you do so voluntarily.

Should you choose to register for an industry-sponsored educational symposium, please know that by doing so you are voluntarily providing the symposium sponsor with select demographic information that they may use for direct marketing purposes.

Photography/Video: No individual or entity other than the AARC may record (audio or video) any portion of AARC Congress 2018 for any purpose without the prior written consent of the AARC.

Digital photos of PowerPoint slides are prohibited. All presented content is the intellectual property of the lecturer. Presenters (at their discretion) may choose to share their slide deck via the mobile event app, otherwise requests for slide decks must be made directly with the presenter.

Minors: Due to the cost and complexity of displayed equipment in the Exhibition, minors under the age of 13 will not be permitted in the Exhibit Hall for any reason. Children ages 13-17 (with prior approval from Show Management) may participate in all Congress-related functions with an adult escort and must pay the appropriate Guest registration fee. Requests should be directed to: Annissa Buchanan at annissa.buchanan@aarc.org or 972-243-2272.

Marketing Products/Services During the Meeting: Only confirmed exhibitors may market products or services to meeting attendees or other exhibitors. Paying attendees are not permitted to do so.

Removal from Premises: The AARC reserves the right to remove any attendee/exhibitor from the premises without refund.

Registration (continued)

Pre-Congress Courses

- Pre-courses will be held on Monday, December 3, 2018.
- Pre-Courses run concurrently. You may register for only one of the courses.
- You must attend the entire course to receive CRCE credit; no partial credit will be given.
- Students do not receive CRCE credit.
- Course capacities are limited.
- Pre-registration is required. Deadline: Tuesday, November 13, 2018 or when the course is full.

AARC PRE-COURSES

Challenges In Mechanical Ventilation: An Interactive Approach

8:00 am – 4:45 pm (Lunch is on your own)

| | |
|-----------------------|---------------------|
| AARC member: \$120 | Senior member: \$30 |
| Student member: \$20* | Non-member: \$155 |

Women in Leadership

1:00 pm – 5:00 pm

| | |
|-----------------------|---------------------|
| AARC member: \$75 | Senior member: \$20 |
| Student member: \$15* | Non-member: \$100 |

**Students do not receive CCE credit.*

INDUSTRY-SPONSORED PRE-COURSE

Teleflex

Ultrasound-Guided And Emergent Vascular Access Simulation Workshop

8:00 am – 12:00 pm

| | |
|-----------------------|---------------------|
| | Senior member: \$20 |
| AARC member: \$75 | Non-member: \$100 |
| Student member: \$15* | |

**Students do not receive CRCE credit.*

To Register

Go to <http://tinyurl.com/registration-aarc-congress2018>.

Receipts

A receipt for your registration fee(s) will be emailed to you when your registration is complete. Present this receipt on-site to receive your name badge and your registration packet(s).

On-site Congress Registration Hours

| | |
|-----------------------|---|
| Monday, December 3 | 10:00 am – 6:00 pm |
| Tuesday, December 4 | 7:00 am – 4:00 pm |
| Wednesday, December 5 | 7:30 am – 4:00 pm |
| Thursday, December 6 | 8:00 am – 4:00 pm |
| Friday, December 7 | 8:00 am – 10:00 am |
| | 8:00 am – 2:00 pm—CRCE Assistance Available |

Travel and Monorail Discounts

Discounts are offered to AARC Congress attendees, exhibitors, family members, and friends.

The air, car and shared-ride shuttle discounts are valid for the McCarran International Airport (LAS) [www.mccarran.com]. The airport is approximately 15 minutes away from the Mandalay Bay Resort and Convention Center/Delano Las Vegas.



- **Online** at www.budget.com. Enter the **BCD** number, **U064639**, to receive the discount.
- **Call** 800-842-5628. Refer to **BCD** number **U064639**.



- **Online** at www.enterprise.com. Enter Discount Rate Code **L9D0194** in the "Promotion Code" box.
- **Call** 800-736-8222. Refer to Discount Rate Code **L9D0194**.



- **Online** at www.hertz.com. Enter **049T0014** in the Convention Number (CV) discount code box.
- **Call** 800-654-2240 or 405-749-4434. Refer to Convention Discount Number **049T0014**.



SuperShuttle is offering a 10% discount off the shared-ride fare from McCarran International Airport (LAS). To receive the discount, tickets must be pre-purchased online at least 48 hours in advance. Go to www.supershuttle.com and enter code **APE54**. Additional coupons cannot be combined.

TAXI

Fares shown are for up to five people in the vehicle.

- Some taxis will not accept credit card payments. Notify the attendant or driver beforehand if you plan to use a credit card.
- There is a \$2 charge on all fares originating at the airport.
- McCarran International Airport (LAS) to the Mandalay Bay and Delano:
\$22-\$26 (includes an Airport Sitting Fee)
- Hotel to McCarran International Airport (LAS):
\$20-\$24



- **Online** at delta.com. Choose "Advanced Search" and enter Meeting Code **NMRMJ**.
- Call Delta Meeting Network at (800) 328-1111. Refer to Meeting Code **NMRMJ**.



- **Online** at www.united.com. Click "All Search Options". On the "Book a Flight" page, enter **ZEU3345071** in the Offer Code box under "Promotions and Certificates".
- **Call** United Reservations Meetings Desk at 800-426-1122. Refer to **Z** code **ZEU3** and Agreement Code **345071**.



The Las Vegas Monorail is offering AARC Congress 2018 attendees fare discounts. Use the Monorail to get around the Las Vegas Strip without the hassles of traffic and wasted time. Buy tickets online at tix.lvmonorail.com/AARC2018.



Uber and Lyft pick up and drop off in Terminal 1 and Terminal 3 at the LAS airport.

AARC Congress 2018 in Las Vegas, Nevada

Site

The Mandalay Bay Resort and Convention Center, including the attached Delano Las Vegas, is the headquarters hotel and site of all official Congress pre-courses, lectures, exhibits, and social functions. Delano Las Vegas is an all-suite boutique luxury tower. All sleeping rooms in both properties are non-smoking. The hotel complex is located at 3950 Las Vegas Blvd South, Las Vegas NV 89119, USA.

Housing Instructions

ALERT: Unauthorized housing entities are contacting attendees and exhibitors to book Las Vegas hotel reservations. **Only the phone numbers and link shown on page 88 are authorized by the AARC.**

Neither the AARC, nor our hotel's Housing Department, will be making unsolicited calls regarding hotel reservations. Booking through an unofficial housing company puts you at risk for losing significant deposits and hotel reservations, and incurring hidden costs.

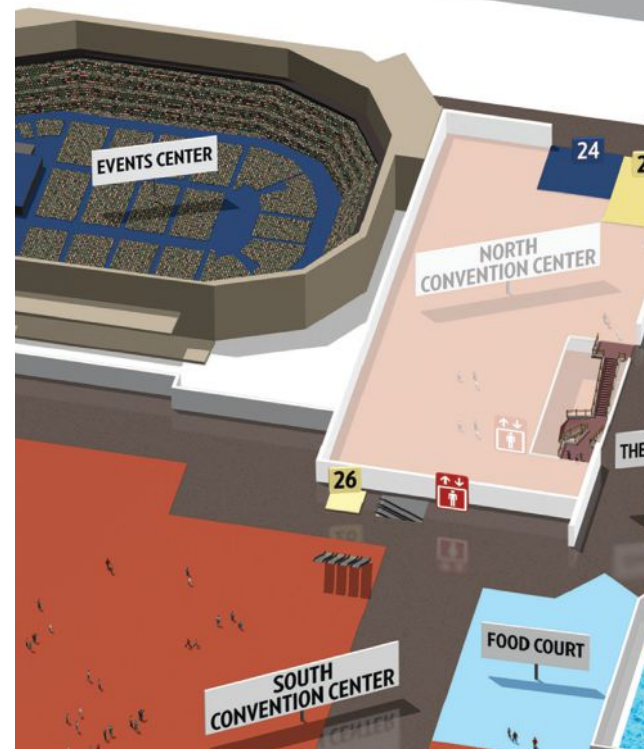
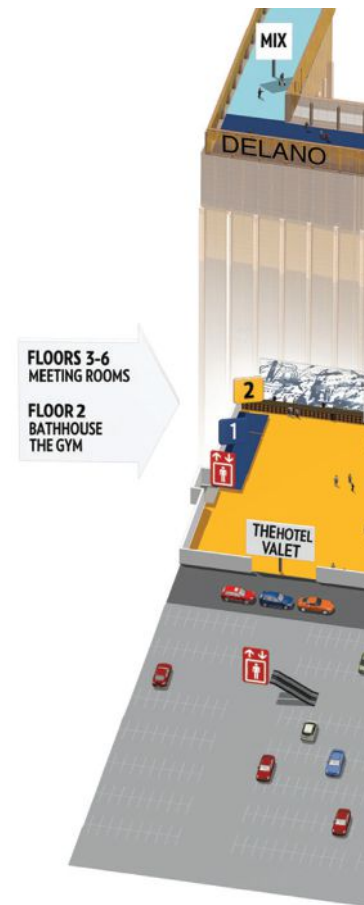
Mandalay Bay Resort

With Strip and mountain views through floor-to-ceiling windows, each room features marble spa tubs and separate showers, 42" plasmas and one king or two queen size lofty pillow-topped beds.

Delano Las Vegas

Each suite features a private bedroom with a king or two queen size beds, a spacious spa-style bath, and separate living room with a wet bar and its own powder room. The number of these suites is limited.

(Continued on page 88)



Las Vegas, NV



Hotel Information

AARC Congress 2018

Reservation Deadline

Wednesday, November 7 is the deadline to make your reservation at the AARC discounted rates. After this date, the official AARC room blocks will be released by the hotel and they may charge significantly higher rates for any rooms that are still available.

Rates

- The nightly rates shown below are for single/double occupancy.
- Rates are a plus a nightly \$23 resort fee and 13.38% tax (subject to change without notice).
- Resort fee includes:
 - » In-room high speed wireless Internet
 - » Cardio Center admission (does not include Spa access)
 - » Daily newspaper
 - » Local and toll-free number calls
 - » Outgoing faxes at the hotel Business Center
 - » Boarding pass printing at the hotel Business Center

| | Mandalay Bay | Delano |
|----------------------|--------------|--------|
| Rate (single/double) | \$ 144 | \$ 169 |

Make Your Reservation

- **Online** at <http://tinyurl.com/housing-aarc-congress2018>.
- or **Call** the hotel's Group Services at 702-632-9000 or toll-free at 877-632-9001. Tell the agent that the name of the meeting is "AARC Congress 2018".

First Night Deposit

- All reservation requests must be accompanied by a credit card. The card will be charged the first night's room rate and tax at that time in order to guarantee the reservation. Attendee may then send a check and the credit card will be refunded for prior payment collected.

Cards must be valid through December 2018.
Cards accepted: American Express, Discover, MasterCard, Visa.

Check Policy

- Guests who would like to pay the initial deposit or any room, resort fee and tax in the form of a personal check, business check, or a cashier's check may do so as long as the check is received no less than 14 days prior to the check-in date.
- If a personal, business, or cashier's check is received less than 14 days prior to guest arrival, the check will be returned unprocessed and the reservation will remain guaranteed under the credit card used to secure the deposit.

Credit/Debit Card Charges

- The credit or debit card used to reserve your reservation will be required for check in upon arrival. If paying with a credit card, you must present the credit card at check-in unless a previously arranged third party credit card authorization is completed for the booking. If you are not the credit card holder, please contact Room Reservations at 702-632-9000 or toll-free at 877-632-7800 for details on the credit card policy.
- The hotel will place an authorization against the card account to cover applicable charges for room, taxes and resort fees, as well as a \$100 incidental amount per day (up to a maximum of \$400) to allow you access to room charging privileges and may result in additional authorizations should your charges exceed the originally approved amount. Guests using a debit card in place of a credit card acknowledge unused funds are released upon check-out and may take 3-10 business days for domestic banks and up to 30 days for international banks to become available through their financial institution.

Special Requests

Special requests cannot be guaranteed; however, the hotel will do their best to honor all requests. The hotel will assign specific room types upon check-in, based on availability.

Acknowledgement/Confirmation Numbers

- Internet reservations: Print the page at the end of the reservation process that shows your **acknowledgement number**. You will also receive an e-mail acknowledgement.
- Phone reservations: You will receive an **acknowledgment number** from the agent and can request an e-mailed acknowledgement.
- Changes made to a reservation after the November 7 deadline will receive a **confirmation number**. That number will cross-reference to the original reservation acknowledgement number.

Cancellations/Refund of Deposit

The first night's deposit is fully refundable provided a notice of cancellation is received by Room Reservations at 877-632-7800 at least seventy-two (72) hours prior to the arrival date. Cancellations less than 72 hours before your scheduled arrival (and no shows) will result in a forfeiture of the first night's deposit.

Reward your staff with a trip to Congress

Day Tripper Group Package \$700

Package includes: 4 one-day vouchers to AARC Congress 2018. Price equates to \$175 per day, a savings of about 25% from the daily full-day registration rate for AARC members.

This year the AARC is again offering everyone a flexible opportunity to attend this premier event.

Individual Attendees... Want to attend AARC Congress 2018, but can't get the time off from work for all 4 days of the meeting? Perhaps a single day registration is more affordable and right up your alley. The AARC Day Tripper Package is a great opportunity for you and three other therapists to attend the 4-day event that is loaded with education, exhibits, networking, and many other activities.

Managers... Maybe you've wanted to send your staff in the past, but your budget can't absorb multiple, 4-day registrations. Even more importantly, department staffing won't let you give multiple employees off all at the same time.

Here's how it works:

- Order the Day Tripper Voucher Package any time between now and Tuesday, November 13.
- You will receive 4 one-day vouchers to Congress 2018 in Las Vegas.
- Each voucher is good for one person for any one of the 4 days of Congress (December 4–7).
- The attendee brings the voucher to the Onsite Registration counter on the desired day and uses it to register for that day.

- The attendee has all the same privileges as other attendees who purchase a one-day registration onsite at the rate of \$235 for members or \$360 for nonmembers, a savings of up to \$185 per person!

Benefits to Attendees

- Earn CRCEs at premier educational programs
- Opportunity to visit the largest respiratory care exhibit hall in the world
- Network with other professionals and meet the "who's who" in respiratory care

Make it easy on yourself:

- Collaborate with your colleagues and decide at the last minute whom will attend—or change it if circumstances change.
- Mix and match any way you want. A different person can attend each day. Or 4 people can all attend on one day. Or 2 people can use vouchers for 2 days each. Make it work for you and your schedule.
- Anyone you select can attend... members or non-members.

Answers to FAQs:

- Day Tripper is a special advance purchase program available only between now and Tuesday, November 13.
- Payment is required in advance with a check or credit card. Sorry, no purchase orders.
- Purchase of a Day Tripper package will be a stand-alone transaction. It cannot be combined with a Congress registration purchase.
- **The package is nonrefundable.**
- Vouchers may be used by AARC members or nonmembers.

- Vouchers are fully transferable by the purchaser or within the purchasing company, and are not specific to a day of the event or to an individual. They may be used at any time during AARC Congress 2018.

• *Lectures will be presented December 4–7, Tuesday through Friday. Note that exhibits are open December 4–6 only.*

- Registration for specific names and dates is not required in advance. The attendee simply brings the voucher to the Onsite Registration counter upon arrival.
- Vouchers can be used on four different days, or all on the same day, by 1 person for 4 days, 2 people at 2 days each, or 4 people each attending one day... or any one of the many different combinations. The choice is yours!

To take advantage of this great Day Tripper package visit <http://tinyurl.com/daytripper-aarc-congress2018>.

Questions?

Contact info@aacr.org or call Customer Service at (972) 243-2272.

— 2018 —

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.

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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 health care 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.



*Changing lives
with every breath*



5 “Not To Be Missed” Sessions in Vegas

2018 Congress speakers offer a sneak peek at top lectures and symposia

This year’s AARC Congress in Las Vegas will deliver a wealth of indispensable information for you, your organizations, and — most importantly — your patients. Here are five sessions we think need to be on everyone’s must-have list. In the next few issues of *AARC Times*, we plan to bring you more speakers’ previews, so stay tuned.



1 Searching for Florence: Respiratory Care Needs a Nightingale

Mike Hess, BS, RRT, RPFT

For this presentation, I took some inspiration from a discussion we had in the AARConnect Leadership Book Club group. We read and discussed *The Florence Prescription*, by Joe Tye. The book is a great primer on developing a culture of staff ownership at the hospital level, but it also really got me thinking about Florence Nightingale's place in medical history and how her deeds resonate even today.

Through her use of leadership by example, Florence Nightingale essentially defined the modern role of nursing and now serves as an exemplar for their profession. She's a touchstone for anyone in or outside of nursing to recognize and identify with. As a result, nurses rarely have to explain what they do or teach what part they play in the larger health care system.

We all know that's not true for respiratory care. We don't really have anyone whom we can point to as an example and say, "That's what I do." As a result, we continue to struggle with our own professional identity and we have

difficulty developing a sense of ownership; it's also harder for us to raise morale and get buy-in across our profession to advance the role of the respiratory therapist. Of course, when we have trouble doing all of that for ourselves, it's even harder to explain the RT's value to legislators, administrators, and policymakers — and that holds us back as well.

During this discussion, we'll take a look at examples of prototypical individuals in other professions (and candidates for that role within our own history) and the importance of archetypes and aspirational figures. We'll determine the ideal characteristics that our own version of the "Lady with the Lamp" should have, and we will encourage everyone to nurture and empower the role model from within themselves.

Mike Hess is a chronic lung disease coordinator at Western Michigan University Homer Stryker MD School of Medicine in Kalamazoo, MI. ■

2 Controversies in Tracheostomy Management

Constance Mussa, PhD, RRT, RRT-NPS

Providing cost-effective, high-quality care for patients with tracheostomies is a complex undertaking that can be challenging due to multiple factors, including the nature and severity of disease, patient age, the extensive assortment of trach tubes, and variations in the skill level of care providers. The lack of high-quality evidence regarding the care of this unique and challenging patient population complicates the situation. What is a respiratory therapist to do?

Several organizations, including the American Academy of Otolaryngology—Head and Neck Surgery Foundation (USA), the Agency for Clinical Innovation (Australia), and the Intensive Care Society (UK), have developed consensus statements and guidelines to decrease practice variation among clinicians in the management of tracheostomy patients, with the ultimate goal to improve care and clinical outcomes. The AARC is in the process of developing new guidelines to assist RTs in providing evidence-based care to tracheostomy patients as well.

This presentation will address the following issues that remain controversial in the management of tracheostomy patients, from the perspective of the most current evidence:

- How often should we change tracheostomy tubes?
- What is the best humidification strategy for spontaneously breathing tracheostomy patients?
- Should the tracheostomy tube cuff be inflated or deflated in spontaneously breathing tracheostomy patients?
- How do we select the most appropriate communication method for tracheostomy patients?
- How can we best ascertain if it is appropriate to begin oral feeding in a tracheostomy patient?
- How can we best prevent tracheostomy-related pressure injury?
- Should tracheostomy care teams be the standard of practice in the management of tracheostomy patients?
- How should we approach weaning and decannulation?

Interactive discussions involving tracheostomy management case scenarios will also be included in the presentation. Following the session, clinicians will have a better understanding of how to safely and effectively care for tracheostomy patients using the best available evidence.

Constance Mussa is an assistant professor at Rush University in Chicago, IL. ■

3 Ventilator Alarm Safety — Where Are We Now?

Connie C. Dills, MBA, RRT, RPFT

Rich Zink, managing director of the Regenstrief International Center for Medical Device Informatics (REMEDI), and I will take the stage to discuss where we stand as practitioners in managing ventilator alarms since The Joint Commission's NPSG-06.01.01 on Alarm Safety was instituted on July 1, 2014. It's been four years. What's been done to combat alarm fatigue and keep our patients on mechanical ventilation safer?

I will begin with a brief review of the subject matter and share an example of how one organization has found a way to successfully manage a large population of ventilators and the alarms they generate. Rich will then outline the efforts of a national ventilator collaborative working with REMEDI. Along with the researchers from REMEDI, the ventilator collaborative is composed of a community of clinicians, vendors, and other vested parties. The goal is to work together to increase patient safety by providing managers and practitioners with evidence-based data to help them better manage ventilator alarms.

A database for sharing ventilator data is part of the mix. The REMEDI Ventilator Settings application allows respiratory technicians and other clinicians to examine the variation in the default settings hospitals use for key ventilator alarms, including positive end-expiratory pressure, peak inspiratory pressure, tidal volume, minute volume, respiratory rate, apnea, and disconnect priority. Users can benchmark other hospitals by filtering on several hospital characteristics (e.g., urban/rural, size, teaching/non-teaching, primary population, care level, etc.)

If you're behind the eight ball on ventilator alarm safety, this two-speaker session will not only bring you up to speed, but will also provide you with some valuable information and tools to get you moving in the right direction.

Connie Dills is currently a clinical applications specialist for Vyair Medical; before joining the company, she was the respiratory practice manager at the Hospital for Special Care in New Britain, CT. ■

4 Student Symposium for New Professionals

Cheryl Hoerr, MBA, RRT, FAARC

Whether you're just beginning your job hunt or you still have some time left before you graduate, making the transition into the health care workforce can be overwhelming, and finding a great job can be hard work. That's why the Student Symposium for New Professionals is a definite "must" for students and new graduates attending the AARC's International Respiratory Congress this year. The availability of open respiratory positions varies in different markets across the United States, and the information on topics presented in this symposium will provide the expertise you need to outshine the competition and impress those hiring managers.

As all therapists know, you have to have your credential to be considered a viable job candidate, and the "gold standard" for the respiratory care profession is the RRT. If you're confident of your knowledge and skills but still apprehensive about sitting for the Therapist Multiple Choice Exam, we can help put your mind at ease as we share proven tips, techniques, and strategies for boosting your chances of success on this critical credentialing exam.

Of course, the objective of obtaining your RRT credential is to position yourself to get the dream respiratory position that's been your driving goal for years! But getting hired takes more than just showing up for a scheduled job interview. Competition can be fierce, and you need to be laser-focused on presenting yourself as the best and only possible candidate for the job in question. You do that by highlighting the good, minimizing the questionable, and always presenting yourself as a professional. Our tips on resume writing and professionalism will ensure you show yourself in the best light possible to any future employers.

Finally, once you're on the path to a long and rewarding career in the respiratory profession, you'll need to find ongoing inspiration to keep you motivated when times get tough. You also need to know what options are available when it comes to getting and staying involved in your profession. Respiratory care is definitely changing, and the changes that will advance our profession are exciting! So come to the Student Symposium to gain a head start on the competition and get your professional career started.

Cheryl Hoerr is Director of Respiratory Services, the Sleep Center, and neurology at Phelps County Regional Medical Center in Rolla, MO. ■

5 Top 5 Respiratory Controversies in the Neonatal ICU

Robert DiBlasi, BSRT, RRT, RRT-NPS, FAARC

Infant mortality caused by respiratory distress in the United States decreased from approximately 268 per 100,000 live births in 1971, to 98 per 100,000 live births in 1985, to 17 per 100,000 live births in 2007. This mortality decrease was multi-factorial, but improvements in ventilator technology and the training and experience of respiratory therapy staff likely played an important role.

RTs in the NICU setting are caring for smaller and sicker patients than ever before. These RTs are challenged with making important clinical decisions that could impact outcomes in this specialized patient population. RT research has progressed over the last decade, but many of the commonly used NICU therapies have not been scientifically validated based on data from large randomized controlled trials. Many new ventilation modes and ventilation strategies are available to assist with the optimization of mechanical ventilation and prevention of ventilator-induced lung injury as well, but with the lack of definitive data, management of these devices can vary and is based more on personal preference and conventional wisdom.

Based on the fact that there is no consensus, several important clinical controversies exist in the NICU RT community. Some of these controversies include issues as simple as selecting the proper nasal airway interface for noninvasive support, to deciding between multiple locations to place a nebulizer in the ventilator circuit for aerosol therapy. This interactive lecture will explore available evidence related to a number of NICU topics, including: 1) pressure vs. volume-targeted ventilation, 2) jet vs. oscillatory high-frequency ventilation, 3) high-flow vs. CPAP, 4) manual ventilation practices, and 5) minimally invasive surfactant delivery options.

Clinical controversy among RT clinicians is not a bad thing! It helps identify areas that clinicians need to focus on and is a call for much-needed research that will hopefully shed new light on these controversies and improve practice. This discussion presents a unique opportunity for clinicians to have open discussions related to NICU RT care and to identify areas for potential future research.

Rob DiBlasi is a research manager in the respiratory therapy and developmental therapeutics departments at Seattle Children's Hospital in Seattle, WA. ■

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Get Ready To Eat Your Way Through Vegas!

by Debbie Bunch

Thanks to an array of new and innovative restaurants, Congress attendees will have plenty of delicious delights to choose from this December 4–7.



While Las Vegas may not be known as the city that never sleeps, it is certainly true that it provides plenty of options for putting off bedtime. Respiratory therapists specializing in sleep medicine may advise against putting off sleep, but one thing is certain: not sleeping leaves plenty of time for eating, and Vegas — the host of this year’s AARC Congress — has that covered. Indeed, today’s Vegas is a true “foodie” destination, full of cut-

ting-edge cuisine from some of the leading chefs in the world. The city has been named one of the nation’s top five restaurant cities by *Bon Appétit* magazine and was recently named one of the Top 10 Wine Destinations by *Wine Enthusiast Magazine* as well.

The good news is, it’s not all crazy expensive either. You’ll find plenty of unique yet reasonably priced fare to please the palate, and even the classic Vegas buffet is still

AARC Congress 2018 promises to deliver the education you need to succeed on the job — but sometimes you can learn a lot by breaking bread with your fellow attendees, too.

around in a few places, albeit with a modern new flare that has elevated the “all-you-can-eat” concept to new heights.

Check out these new establishments

What’s new in Vegas since the AARC last visited the city? Take a look!

Celebrated chef Giada De Laurentiis has opened **Pronto by Giada** at Caesars Palace. The restaurant offers her signature Italian fare with California influences in a fast, casual format.

Once at The Venetian Las Vegas is a Peruvian Nikkei dining experience from famed Los Angeles chef Ricardo Zarate. The menu focuses on indigenous South American flavors.

Palms Casino Resort has opened **A.Y.C.E. Buffet**. Standing for “All-You-Can-Eat,” the new restaurant offers a diverse menu with made-from-scratch recipes and is open for breakfast, lunch, dinner; it also has a bottomless Mimosa Sunday brunch.

Good Pie in Pawn Plaza serves four types of pizza, with a special focus on the Grandma Pie, a crispy square that’s well-known in certain neighborhoods of New York City.

Masso Osteria at Red Rock Resort was inspired by the rocky desert landscape that surrounds Summerlin. The menu features house-made pastas, antipasti, and savory wood-fired sides.

Esther’s Kitchen in the downtown area — the creation of Vegas native James Trees — showcases a menu of seasonal Italian soul food.

China Tang Las Vegas at The MGM Grand serves up Cantonese cuisine heavily influenced by provincial dishes from Sichuan, Shanghai, and Beijing. The cocktail menu is inspired by Colonial-Era China.

Osteria Costa at The Mirage features classic dishes like hand-pulled

mozzarella, house-made pasta, traditional Neapolitan-style pizzas, seafood, and more by Chef Michael LaPlaca.

Gordon Ramsay has opened the world’s first **Gordon Ramsay Hell’s Kitchen** restaurant at Caesars Palace. The menu is highlighted by Hell’s Kitchen signature dishes made with the highest-quality ingredients.

Award-winning New York burger joint, **Black Tap Craft Burgers & Beer**, is now at The Venetian Las Vegas. Featuring patio dining overlooking their scenic outdoor canals, this spot is famous for its craft burgers along with a signature cotton candy strawberry shake.

Two new places have opened at Park MGM. The **Primrose** features French-style fare and garden-inspired cocktails by Chef Bryce Shuman. Renowned Chicago classic, **Bavette’s Steakhouse & Bar**, offers fresh seafood towers, delicious steaks, traditional side dishes, and house-made desserts.

Tropicana Las Vegas has debuted **Savor, the Buffet**, where guests can feast on a wonderful spread of signature and eclectic dishes in made-to-order and create-your-own stations.

Sparrow + Wolf is a new restaurant from Chef Brian Howard featuring American cuisine. Plates are meant to be shared, and special dishes are featured on a rotating basis.

The highly anticipated **Robert Irvine’s Public House** is now open at Tropicana Las Vegas. The renowned chef and TV personality celebrated opening day by making a grand entrance by helicopter.

Chef David Chang’s **Momofuku** has come to The Cosmopolitan of Las Vegas. The 200-seat establishment serves Fuku chicken sandwiches, fried chicken with caviar and *bossam*, and a Korean-inspired soup selection.

Fans of **Milk Bar** can also find the first Las Vegas location at The Cosmopolitan. The menu features delectable desserts, including an exclusive list of items only available in Las Vegas.

Masaharu Morimoto, renowned Japanese chef and star of Food Network’s “Iron Chef America,” has brought his famous restaurant, **Morimoto Las Vegas**, to The MGM



Foodie Finds at Congress 2018



Grand. The contemporary Japanese restaurant features signature sushi creations and cocktail offerings, including exclusive selections made specifically for the Las Vegas location.

Libertine Social by Chef Shawn McClain celebrates social dining at Mandalay Bay Resort & Casino. Gourmet toasts and dips, indulgent flatbreads, personalized sausage boards, and more are available for guests looking for a new dining concept that allows them to mix, mingle, and enjoy.

Wahlburgers, founded by brothers Mark, Donnie, and Paul Wahlberg, is now open inside the Grand Bazaar Shops at Bally's Las Vegas. The menu emphasizes fresh, high-quality, yet simple food reflecting some of their family's favorites.

Guy Fieri's second Vegas restaurant is the **El Burro Borracho** at Rio All-Suite Hotel & Casino. Authentically prepared Mexican dishes, including crispy mahi mahi Juan tacos, Acapulco gold salad, lava rock shrimp, and more, can be found here.

Bellagio Resort & Casino is home to farm-to-table restaurant **Harvest** by Roy Ellamar. Delivering on a market-driven concept, the restaurant features regional American dishes that include sustainable and locally grown products.

Alain Ducasse's **Rivea** is located at The Delano and features dishes influenced by the food markets of Provence and Italy. The restaurant also offers an unparalleled, 180-degree view of the city below.

Searsucker Las Vegas at Caesars Palace features new American classics from celebrity chef Brian Malarkey, with an emphasis on comfort foods from the ocean, the ranch, or the farm, all with a contemporary spin. Malarkey's **Herringbone** at ARIA showcases his acclaimed ocean-to-table concept as well, bringing Southern California coastal cuisine to the Las Vegas Strip.

Julian Serrano's **Lago** at Bellagio Resort & Casino is the first Italian restaurant from the award-winning chef, whose namesake Spanish tapas eatery at ARIA Resort & Casino and French-inspired fine dining room **Picasso** at Bellagio Resort & Casino are among the most popular dining destinations on the Strip.

Yardbird Southern Table & Bar is located at The Venetian Las Vegas and features farm-fresh ingredients and classic Southern cooking, culture, and hospitality.

And last but not least, for you fast-food aficionados out there, **Taco Bell** has opened a flagship restaurant called **Taco Bell Cantina** in the heart of the Strip. The two-story restaurant features an outdoor patio, digital displays, and unique offerings only available in Las Vegas.

Hungry yet?

Clearly, Las Vegas has become a culinary paradise for anyone who enjoys a great meal. So if you'll be at AARC Congress 2018, start making plans to get together with colleagues after the sessions have ended for the day and take advantage of some of the wonderful dining options awaiting you this December 4–7 in fabulous Las Vegas! ■

Want to learn more about the dining scene in Las Vegas? Go to www.visitlasvegas.com.





Fifty Ways To Get to Vegas, Baby!

Creative Ways RT Students Can Fund Their Trips to the National Sputum Bowl Competition by Jalyynn Venis



2017 student winning teams (left to right) First place (TX), second place (FL), third place (CA & MI)

For competitive RT students, attending Congress and participating in the National Sputum Bowl competition is a dream. This year's event is happening in America's land of palaces — Las Vegas! It's also the world's largest city devoted to gaming and competition.

Think of Vegas and you imagine billions of lights coloring the strip, opulent hotels, star-studded performances in grand entertainment halls, great music, direct-from-Broadway shows, beautiful people everywhere, and wild and wonderful experiences. After all, there is some truth to what they say about Vegas.

It can be a challenge for RT students to cover the costs of all this bliss and of going to Congress to compete in the National Sputum Bowl. But it's a challenge worth taking. How can you not go? It's an opportunity that's been years in the making. You've prepared for it, you've earned it, and you've got to make this happen, because... this is Vegas, baby!

The road to "Nationals"

There are two kinds of teams that participate at the National Sputum Bowl — state or division affiliate teams and renegade teams. The affiliate teams have won state competitions and their expenses are often paid for or partially funded by the state societies. Some states have different regions or chapters under the state society, such as California.

"The student winning team in our region, during an event called 'Student Night,' gets at least \$1,000 from the local chapter when they go on and compete in the Sputum Bowl at the State Convention," says Grey Benton, MA, RRT, RRT-NPS, RPFT, of California. "If they win at the State Convention, they will get money from the CSRC for competing at the National Convention. San Joaquin Valley College (my employer) has also chipped in to support winning Sputum Bowl teams, helping them with travel and other expenses."

Renegade teams are composed of those tireless competitors who refuse to go down without continuing the fight for rights to the national trophy. Renegades are all the other teams that want to compete. The great thing about renegades is this: They have all the fun and much less of the pressure felt by state championship teams. Renegades often have the best sense of humor, wear the most extreme costumes, and love to show the national membership there's no such thing as an RT student who's not a winner!

50 ways...

With that in mind (and compliments to Paul Simon and his legendary song stylings), here are some bona fide ways of earning extra income to make your trip to Congress and Vegas a reality.

*Wash those cars, Marge.
Start a rock band, Stan.
Babysit a child, Wilder.
And get yourself dough.*

*Have a bake sale, Dale.
Park those cars, Lars.
Get a lemonade stand, Rand.
Go to Nationals any way you can.*

"When I played as a student," says Sherry Whiteman, MS, RRT, and president of the Missouri Society of Respiratory Care, "the majority of our expenses were covered by the state — we only had to cover food and spending money. We were staying in a condo that had a kitchen, so we made a trip to the grocery store to save on food costs. The guys on our team even grilled out for us one night!"

Many students try to find the closest, cheapest motel near the Congress host hotel, which is the Mandalay Bay Resort this year. Sharing a room with a teammate and

avoiding the most expensive direct flights can save money, too. Some teams rent condos and make more time for practice rounds before they compete.

Have a garage sale, Gail.
Cut the grass, Cass.
Detail the Caddy, Addy.
And beeline to Vegas.

Sell baseball cards, Bernard.
Win at poker, Schroeder.
Sell that bike, Mike.
And buy a plane ticket.

"We were fortunate that our state society, the FSRC, covered flight, hotel, team registration, and reimbursement of up to \$45 per day as a food allowance for the winners of the state competition," says Marco Manso, BA, RRT, RRT-NPS, RPFT, of Florida. "The out-of-pocket costs for us were minimal. And, thankfully, we managed to secure time off from our respective hospitals without any issues."

Part with your canoe, Lou.
Raise bees for honey, Sunny.
Get a part-time job, Rob.
Pose for a drawing class, Sass.
And get that application in!

Send in those rebates, Nate.
Take online surveys, Jay.
Make and sell candy, Randy.
There's money to be made.

Students often have a variety of challenges to overcome to get to the National Sputum Bowl competition. More than the travel costs, there are full-time jobs to consider, work they can't afford to miss, and children who must be cared for while the parent is out of town.

"I remember one of our teammates named Diana was born in Colombia," says Simon Taylor, RRT, CPhT. "She had a young child at home and needed to have someone care for him while she was away at the competition but could not really afford to pay for a 24/7 babysitter. She ended up flying her mom in all the way from Colombia to Orlando, FL, to take care of her son while she was away competing, as this was more affordable for her. I thought that was truly remarkable to see her and her family pull together like that to support her dream of representing Valencia College and the state of Florida on a national level."

Be a test subject, Beck.
Sell your hair, Blaire.
Rent your shed, Jed.
Be a dog walker, Parker.

Think watermelon stand, Jan.
Sell shoes on ebay, Ray.
Sell your textbooks, Cook.
Or sell Mary Kay, May.

Recycle cans, Dan.
Rent out your bed, Ned.
Open a B&B, Dee.
And soon you'll be there.


"Before I knew it, there I was with my own Sputum Bowl team, competing on the same national stage I had watched from the audience just one year prior to that," says Taylor. "Proof that dreams do come true with hard work and smart choices."

Open a kissing booth, Ruth.
Start a marathon, Jon.
Sell your friends a lift, Biff.
Shop for Aunt Millie, Billy.

Dunk booth rental, Yentle.
Trim the trees, Lee.
Milk the cows, Al.
Get some chicks, Mick...
And sell those eggs.

"Obviously, Sputum Bowl competition is a knowledge contest," says Benton. "Winning at any level signifies that the student is smart and has some competitive drive. This looks good on a resume. I have heard department managers say that they would hire anyone who made it to the finals in Sputum Bowl competition. I have also seen this take place. In 2009 my student team made it all the way to the national finals and won. All four of them were hired quickly."

Apply for Sputum Bowl 2018 Now



Weed the garden, Martin.
Trim the shrubs, Bub.
Wash house windows, Lindo.
Clean your relatives' homes, Holmes.

Sell fresh catch, Hatch.
Muck out some stalls, Rawls.
Sell your fine art, Hart.
Bet on a winning pony, Tony
And have a good time!

"It was a wonderful privilege to represent Florida in the competition," says Jessica Winn, RRT, RPFT. "We were able to showcase how well our school, Valencia College, was preparing us for the boards and for our future careers. I still count it as one of the highlights from my school experience."



Write and sell a short story, Jory.
Make videos for job apps, Trapp.
Sell homemade cookies, Sookie.
Bet on a winning pony, Tony
And listen to me.

Some people pay top dollar for old shoes! You might be amazed at what you can sell on ebay. Did you know you can rent a dunking booth for as little as \$175 per day? Dunking your RT program coordinator at the local fair is always fun — and, of course, it's for a very good cause.

"It meant a lot to me to be able to compete at the national level," says Manso. "It was both a great honor and a lot of pressure. We were representing ourselves, our team, the state, our college, and our hospital organizations. Just making it to the competition meant we were at the top of our game, but going as far as possible was exciting and very, very memorable."

If you find yourself short, do what every other student does: Ask Mom and Dad for a little help. They want you to get out of the house. They need you to succeed. And most of all, they love you more than anyone else.

"Attending the National Sputum Bowl Competition meant so much to me," says Whiteman. "The pride of this competition is instilled in us while we are in school, and our program has a long record of bringing teams to the competition. The year we attended, we won the whole competition! It's still a point of pride for me and my school! The competition is about more than just winning though — it's about networking, seeing your profession hard at work, knowing that you are a part of something bigger." ■

Deadlines and Special Notes for the Student Sputum Bowl

Deadlines are coming up quickly for the 2018 Student National Sputum Bowl Competition.

- Application for Renegade teams due: September 7
- Late registration period due: September 8–15
- Visual questions submissions due: September 22
- Team rosters due: September 28
- Roster revisions due: October 12

With the exception of the competition only being open to RT students, the rules haven't changed. You can find the details here: <http://www.aarc.org/resources/programs-projects/aarc-sputum-bowl/>

The most important things for teams to know:

- Each state affiliate may appoint one team which represents their state. All other teams must register as a Renegade team.
- Each team member's AARC membership must be active when registering and while attending the Student National Sputum Bowl.
- The registration fee per team is \$75.
- The late registration (September 8–15) fee per team is \$100.

For more information, contact Pam Russell at the AARC by calling (972) 243-2272 pam.russell@aarc.org. ■



Industry Watch

\$12 million awarded to study lung cancer drug

Scientists at the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA have been awarded a \$12 million grant from the California Institute for Regenerative Medicine to initiate a Phase 1 clinical trial to test a novel cancer treatment for advanced-stage lung cancer. The treatment will combine an immunotherapy drug called pembrolizumab with injections of the patient's own genetically modified immune cells directly into lung cancer tumors. The goal of the trial is to use this combined approach to activate a targeted and precise immune response against lung cancer.

CHEST, Medscape to offer Asthma Center of Excellence

The American College of Chest Physicians (CHEST) has announced a new partnership with Medscape that will focus on supporting physicians in addressing the challenges of diagnosing and treating moderate to severe asthma. Housed on Medscape, the Moderate to Severe Asthma Center of Excellence will provide news, expert commen-

tary, and insights on challenging cases to physicians specializing in chest medicine, allergy, primary care, pediatrics, and emergency medicine. "We look forward to working with Medscape on the Center of Excellence to ensure that all physicians treating patients with asthma have access to the latest information and research on managing this pervasive and challenging disease," CHEST President John Studdard, MD, FCCP, stated.

FDA launches innovation challenge

As part of an ongoing commitment to address the epidemic of opioid misuse and abuse, the FDA has launched an innovation challenge to spur the development of medical devices that could provide novel solutions to preventing, detecting, and treating addiction. "Medical devices, including digital health devices like mobile medical apps, have the potential to play a unique and important role in tackling the opioid crisis," said FDA Commissioner Scott Gottlieb, MD. "We must advance new ways to find tools to help address the human and financial toll of opioid addiction."

Loyola added to PFF Care Center Network

The Pulmonary Fibrosis Foundation (PFF) has added Loyola University Medical Center in Hines, Illinois, to its Care Center Network of centers with expertise in accurately diagnosing and treating patients with pulmonary fibrosis. Loyola provides comprehensive, multidisciplinary care and offers patients with pulmonary fibrosis access to clinical trials of new therapies. Loyola also offers lung transplantation to patients with end-stage pulmonary fibrosis. The medical center is among 60 centers in 30 states that are part of the network.

Pulmatrix announces study results on COPD drug

Pulmatrix, Inc., has announced the publication of data from a dose-ranging Phase 1 clinical study of PURO200 in patients with COPD. PURO200 is a once-daily reformulation of tiotropium bromide for patients with COPD and is being developed as a branded alternative to the Spiriva® HandiHaler®. The study showed that PURO200 treatment at all doses resulted in a statistically significant increase

in FEV¹ compared to placebo and caused similar bronchodilation compared to Spiriva HandiHaler. The lowest PURO200 dose achieved a clinical effect similar to that of Spiriva HandiHaler at a dose that was 83% lower and resulted in 30% less plasma drug exposure. PURO200 was generally safe and well tolerated at all doses compared to Spiriva HandiHaler. The study was published online in the *British Journal of Clinical Pharmacology*.

EasyOne® Air spirometer goes on the market

Henry Schein Medical is now offering the Henry Schein® EasyOne® Air spirometer, a new all-in-one solution in lung-function testing that can potentially improve recognition and diagnosis of COPD. Designed by ndd Medical Technologies, the spirometer has a premium touch screen interface that allows medical professionals to easily navigate and enter data and to view real-time curves. The system uses TrueFlow™, a resistance- and calibration-free measurement technology to help eliminate potential errors and ensure accuracy. The device also features wireless connec-

tivity to a personal computer, enabling patients to view interactive software displays that may encourage them to achieve maximum results when participating in a spirometry test.

PatientPoint® teams up with ALA to educate patients

PatientPoint® and the American Lung Association (ALA) have formed a partnership to bring lung disease education to patients and caregivers in physician offices nationwide using PatientPoint digital waiting-room screens, interactive exam-room touchscreens, and comprehensive lung cancer print resource guides. Specific components of the partnership include placing COPD information and tobacco cessation education on digital waiting-room screens in primary care practices, placing lung cancer education on interactive exam-room touchscreens in oncology practices, and making lung cancer print resource guides available in oncology practices.

Beckman Coulter announces OSA screening study results

According to Beckman Coulter, a study involving 264 adult male patients from six institutions has revealed that screening for changes in three specific biomarkers may be useful in helping to identify obstructive sleep apnea (OSA). Beckman Coulter is the only supplier to currently offer this panel of three assays

on fully automated platforms. Hemoglobin A1c and C-reactive protein are chemistry tests on the Synchron and AU systems, and erythropoietin is on the Dxl and Access 2 immunoassay systems. The results were published in *Nature and Science of Sleep*.

Study supports use of disposable bronchoscopes

A new study funded by the 3M Company and supported by Healthmark Industries has shown that, even when cleaned and disinfected according to current reprocessing guidelines, the majority of patient-ready, reusable, flexible bronchoscopes are contaminated and damaged. Presented at the Association for Professionals in Infection Control's annual conference, the study concluded that using sterilized or single-use bronchoscopes could reduce the risk of life-threatening infection transmission among patients. "The study validates what we have been saying for years, i.e., that single-use bronchoscopes are a better alternative than those that are cleaned and reused," said Lars Marcher, CEO and president of Ambu A/S. "Single-use bronchoscopes, like the ones we have been manufacturing and selling since 2009, are safe, effective, and protect patients from viruses, bacteria, and pathogens that can cause illness and even death."

Proteostasis Therapeutics announces CF drug study results

Proteostasis Therapeutics, Inc., has announced positive results from the company's ongoing 14-day dosing study of PTI-801 in cystic fibrosis patients on background Orkambi® (lumacaftor/ivacaftor) therapy. At higher doses, PTI-801 demonstrated a statistically significant improvement in sweat chloride and body mass index, and improvement in FEV1 was observed across all dose cohorts, although the change was not statistically significant. Two thirds of subjects in all PTI-801 cohorts were above the FEV1 by the end of the treatment period and approached baseline by the end of the seven-day follow-up period. In hyperglycemic cystic fibrosis-related diabetes subjects, PTI-801 led to a statistically significant normalization of glucose levels at the three dose levels analyzed.

ELEVATE study kicks off

BTG plc has announced the start of the RandomizEd ControlLed Study of PnEumRx™ Endobronchial Coil System (Coils) Versus Standard of Care Medical MAnagement in the Treatment of Subjects with Severe Emphysema (ELEVATE) study. The trial will build on previous research conducted in the RENEW study, which showed that Coils can safely and effectively treat severe emphysema,

demonstrating a significant increase in the patient's quality of life with improved pulmonary function and exercise ability. David Hahn, MD, general manager at BTG, was quoted as saying, "The ELEVATE study advances knowledge learned from the RENEW study and uses the very latest in diagnostic technology to help identify the patients most likely to benefit from Coils."

Universities selected for NCI Consortium

Thirteen research institutions nationwide have been selected to serve as research centers in the National Cancer Institute Consortium, including Vanderbilt, Columbia, Harvard, Stanford, and Yale universities, and the Massachusetts Institute of Technology. The consortium will bring clinical and basic science cancer researchers together with physician-scientists, engineers, mathematicians, and computer scientists to tackle key questions in cancer biology from a novel point of view. In addition to cutting-edge cancer systems biology research, the consortium will engage in outreach activities to disseminate systems approaches to other scientific communities and the public at large. ■

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



RC Currents

IN THE NEWS

Why Kids with Asthma Need a Flu Vaccination



Statistics show only about 60% of young kids with asthma receive an annual flu vaccine. Canadian researchers believe increasing that percentage could go a long way to minimizing the incidence of serious asthma exacerbations in these children.

The investigators analyzed data from a previous study they conducted on nearly 1,000 children treated for moderate or severe asthma attacks in emergency departments in their country. Nearly two thirds were found to have the flu or other respiratory viruses, but 20% failed to respond to oral corticosteroids and inhaled bronchodilators. Among that group, most required hospitalization. Further analysis showed that those with influenza or parainfluenza had a 37% or greater chance of not responding to treatment. By contrast, kids with strains of human rhinoviruses, which generally cause the common cold, did respond well to treatment for their asthma. The study was published in a recent edition of *Pediatrics*. ■

Simple Asthma Test May Be on the Way

Mount Sinai School of Medicine, researchers have developed a simple and inexpensive test they believe can be used to accurately identify mild to moderate asthma and differentiate it from other respiratory conditions such as allergic rhinitis, smoking, upper respiratory infection, and cystic fibrosis.

The test uses a brush to collect a nasal sample from the patient, which is then analyzed for a 90-gene biomarker indicative of asthma status. The investigators uncovered the biomarker by applying machine learning algorithms to RNA data acquired from nasal brushes of patients with and without asthma. They plan to study the test in a larger population of patients to see if it can be useful in clinical practice. The study was published in a recent edition of *Scientific Reports*. ■



Thumbs Up ...

... To France, for making a major dent in its smoking population. According to the French Department of Health, more than one million French citizens kicked the habit in 2017. The accomplishment is being credited to recent anti-smoking measures, along with higher taxes on cigarettes. In a report released in June, Health Department Director General François Bourdillon stated, "This historic decline proves to everyone that it is possible to fight against smoking through coherent and integrated actions." ■

Older Asthma Patients Want More Say



Telehealth is being touted as a way to bring much-needed care to patients living in areas where health care services are limited. Researchers from the University of Iowa looked at the timeliness of care delivered to patients in 14 rural hospitals in Iowa, Kansas, Nebraska, North Dakota, and South Dakota who subscribed to a telemedicine provider in Sioux Falls, SD, and they found that it's working.

The team matched 2,857 emergency department cases that used telemedicine services with non-telemedicine controls. Results showed that telemedicine decreased the door-to-provider time by six minutes. In 41.7% of cases, a telemedicine provider was the first provider to see the patient, and in these cases, telemedicine was 14.7 minutes faster. Among patients requiring a transfer to another hospital, length of stay in the first ER was shorter for patients who were seen by a telemedicine provider. The study appeared in a recent edition of *Telemedicine and e-Health*. ■



New Decision Tool for Lung Cancer Screening

Lung cancer screening can save lives, but with a false positive rate that outnumbered true cancers 25 to 1, it may not be for everyone. However, now a team of investigators from the University of Michigan and Department of Veterans Affairs has developed an online tool to aid clinicians in talking with smokers and former smokers about whether they want to be screened. The Lung Decision Precision tool is particularly designed to help those who do not fall in the high-benefit category for screening. About 50% of people who qualify for screening are in that group.

“If a physician is not clear about the potential benefit for a patient who’s in the high-benefit zone, they could miss an opportunity to do something really good for them, to say, ‘I don’t recommend this for everyone, but I recommend it for you,’” explains team leader Tanner Caverly, MD, MPH. “But coming across strong for screening with a patient who has a fine balance of pros and cons could miss an opportunity to give them a choice, to tell them that their decision depends on the kind of person they are.” Dr. Caverly and his colleagues published a report on their screening tool in a recent edition of the *Annals of Internal Medicine*. ■

New Hope for Spinal Cord Injury Patients

If research being conducted in rats at Philadelphia and Jefferson Universities turns out to be applicable to humans, spinal cord injury (SCI) patients of the future may not end up dependent on a ventilator to breathe. The investigators are testing a hydrogel that binds to the neuro-stimulating brain-derived neurotrophic factor (BDNF) and then releases this nerve-repair protein at the site of the injury. A 60–70% improvement in breathing control as measured with



diaphragm-muscle contraction was seen in rats that received the BDNF gel after an SCI.

“Our preliminary work in animal models could lead to new treatments in the future for patients suffering from respiratory compromise, and may also apply to restoring other functions affected by the injury,” study author Angelo Lepore, PhD, was quoted as saying. The study was published in a recent edition of the *Journal of Neuroscience*. ■



Physicians Warn Kids of E-Cigs Danger

Citing mounting evidence that e-cigarettes damage health and are highly addictive, and noting that manufacturers are still marketing them as “healthier” cigarettes and that their popularity among young people is growing, respiratory physicians from six continents have come together to issue a warning about the dangers these products pose to children.

Published in a recent edition of the *European Respiratory Journal*, the warning calls for an immediate ban on flavorings in e-cigarettes, as well as on marketing tactics aimed at convincing children and adolescents that they are a lower-risk alternative to cigarettes. The paper was co-authored by Thomas Ferkol, MD, a professor of pediatrics and cell biology and physiology at Washington University in St. Louis, who noted, “Until recently, the risks of e-cigarettes and their rising popularity with children and adolescents were under-recognized or ignored. We wrote this statement to address growing public health concerns over e-cigarette use among youths.” ■

Contribute to Our “Transitions” Column

The *AARC Times* “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. ■



Wearable Device for Radiation Pneumonitis Enters Testing

The lung inflammation known as radiation pneumonitis often doesn’t show up for weeks or even months after lung cancer patients complete radiation therapy. Researchers from Thomas Jefferson University are hoping a new wearable device will reveal signs of the condition much earlier.

The device was originally designed to measure biometrics related to breathing and activity levels in asthma patients. Adam Dicker, MD, PhD, and his colleagues, who are teaming up with the maker of the device, realized these same measurements could also be useful in detecting radiation pneumonitis, and they are now testing the device in those patients. “Ultimately, we hope to evaluate whether this approach could be used to improve patient outcomes and spot an issue before it becomes a serious problem,” he explained. “Health care is on the brink of remarkable change, and the foundation of this change is rooted in the universe of digital — everything from the Internet of Things to computational computing, big data, and more.” ■

Many VA Hospitals Are Not Mandating Flu Vaccine for Workers



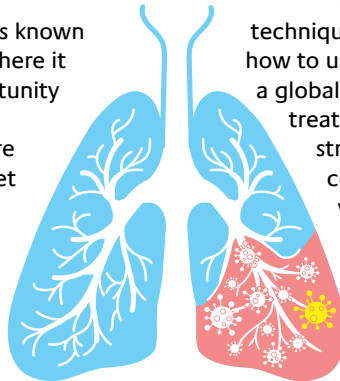
Our nation’s veterans deserve the very best health care possible. When it comes to protecting them against influenza, however, we’re finding that effort may be falling short.

Researchers from the University of Michigan and VA Ann Arbor Healthcare System surveyed hospitals across the country about their policies on requiring influenza vaccines for staff members in both 2013 and 2017. They found that flu vaccine mandates in hospitals other than those operated by the Department of Veterans Affairs went from 44% to nearly 70%. In VA hospitals, however, mandates rose from 1% to only 4%. The study was published in a recent edition of *JAMA*. ■

New Treatment for Deadly Pneumonia

The bacteria *Klebsiella pneumoniae* is known to get into immune cells in the lungs, where it can hide out while waiting for an opportunity to reemerge and cause a deadly case of pneumonia. British researchers who were using a form of nanotechnology to target chemotherapy directly into cancer cells have found the technology can also be used to deliver antibiotics into immune cells harboring *K. pneumoniae*.

The team predicts they will need another five years of work on the



technique to develop the best understanding of how to use it in patients. “Pneumonia remains a global health emergency. By developing this treatment that has proven to tackle this deadly strain of bacteria, our research partnership could change the lives of people across the world,” says study author Chris Scott, from the Centre for Cancer Research and Cell Biology.

A report on the technique appeared in a recent edition of the *Journal of Controlled Release*. ■

Pertussis Vaccine in Pregnancy Pays Off for Newborns

The first study to gauge the effectiveness of giving the Tdap vaccine to pregnant women to minimize pertussis in infants has found that the strategy is working.

Researchers from the University of North Carolina reviewed more than 675,000 U.S. pregnancies to identify the receipt of Tdap during pregnancy, then compared those findings to hospitalizations and outpatient visits for pertussis in infants. Results showed a 75% reduction in pertussis among infants age six months and younger whose mothers received the vaccination while pregnant. A 46% reduction was seen for all of the infants in the study, who ranged in age up to 18 months.

Although previous reports had suggested infants whose mothers were vaccinated during pregnancy would have lower responses to their own Tdap vaccinations, these researchers found no evidence to support that premise.

The study also found that the best time to get the vaccine during pregnancy was during the third trimester, at least two weeks prior to delivery. *The American Journal of Preventive Medicine* recently published the study. ■



Walkable Neighborhoods May Reduce Childhood Asthma

In what is believed to be the first large study to look at the effect of walkable neighborhoods on childhood asthma, Canadian researchers publishing in the *Annals of the American Thoracic Society* find that the less walkable the neighborhood, the greater the incidence of the condition.

The investigators reached that conclusion after analyzing data on 326,383 children age eight to 15 years living in the Toronto area. Low walkability in a child’s neighborhood of birth was associated with an increased risk of asthma development. Among children with asthma, low walkability in a given year was associated with greater odds of ongoing asthma in the same year. The results held true even after they were adjusted to account for gender, preterm birth, neighborhood income, obesity, and allergic conditions. ■

Humidity Doesn't Matter in the Spread of Flu



Scientists have speculated that the flu spreads more quickly in winter due to low indoor humidity levels. Investigators from the University of Pittsburgh and Virginia Tech called that thinking into question in a study conducted in a rotating metal drum that kept aerosols suspended while maintaining a constant relative humidity level.

The team combined samples of human airway secretions with the 2009 pandemic H1N1 flu strain, aerosolized the mixture, and sprayed it into the drum to simulate the coughs and sneezes that would be emitted into a room from someone sick with the flu. The drum was fitted with special filters to prevent the release of the virus, and the entire experiment was run inside a biosafety cabinet.

The drum ran for an hour (the typical length of time air stays indoors before moving outside) at seven different humidity levels representative of dry climates and heated indoor environments in winter, indoor environments during warmer seasons, and rainy and tropical climates. The virus remained equally infective in all the settings.

The researchers believe mucus and other airway secretions protect flu viruses that are sneezed or coughed out into the environment, despite the humidity level. They suggest increasing the air exchange rates in homes and offices and using filtration or UV irradiation of recirculated air during flu season. They also believe more attention should be paid to regular disinfection of high-touch surfaces, such as doorknobs, keyboards, phones, and desks.

The study appeared in the *Journal of Infectious Diseases* earlier this year. ■

Severe Form of Black Lung Disease Is on the Rise




The most serious form of black lung disease, progressive massive fibrosis (PMF), is on the rise in coal miners, particularly young miners in central Appalachia, report researchers from the University of Illinois at Chicago.

The researchers analyzed federal black lung benefits claims from 1970 to 2016. The findings resulted in 4,679 cases of PMF among the 314,176 miners filing claims during that time period, with the proportion of PMF claims rising dramatically since 1978. A significantly accelerated rate of increase was seen after 1996 as well.

Researchers attribute the rise in disease to several factors, including the proliferation of smaller mines with less investment in dust-reduction systems and changes in mining practices that have resulted in the production of higher levels of lung-damaging crystalline silica. They also found that there is a trend of having miners work longer hours and more days per week, which leaves less time for their lungs to clear the dust they have inhaled. The investigators presented their findings at the American Thoracic Society meeting earlier this year. ■

Bacteria Get Mapped



In an effort to find new ways to battle antibiotic-resistant infections, British researchers have mapped the genomes of more than 3,000 bacteria. Included in the mix are samples of a strain taken from the nose of Alexander Fleming, who is credited with discovering penicillin in 1928. The genomic maps are being published on the website of the U.K.'s National Collection of Type Cultures and will be made available free of charge to researchers around the world who want to study these bacteria and how to combat them. ■

Lung-saving Technique May Increase the Number of Donor Lungs

Could a technique known as ex vivo lung perfusion (EVLP) increase the number of lungs available for transplant? That's the question researchers from Loyola Medicine and elsewhere will attempt to answer in a study being conducted among 66 lung transplant patients who receive EVLP lungs and 66 patients who receive standard lungs that qualified for transplant without undergoing EVLP.

In EVLP, potential donor lungs are placed on mechanical ventilation and the blood vessels are perfused at body temperature with a solution of proteins and nutrients. X-rays, bronchoscopies, and oxygen level analyses are conducted to assess the condition of the lungs, and any donor blood remaining in the lungs is diluted and filtered away. Blood clots are also removed, and antibiotics and anti-inflammatory drugs are administered as a precaution. Lungs that pass all the tests are deemed suitable for transplant.

The investigators noted that up to 80% of lungs from organ donors currently go unused because transplant physicians are not sure about their quality. They are participating in a study that will look at preserving donor lungs for a longer period using this method and its effects on safety. ■



Money Talks

In a study conducted among more than 6,000 participants from across 54 U.S.-based companies, investigators from the University of Pennsylvania have found that offering employees free smoking-cessation treatments alone or free e-cigarettes does nothing to help them kick the habit. What does work? Offering them money. The researchers found smokers who received free cessation aids plus \$600 in redeemable funds, which were deposited in an account for each participant and removed if smoking cessation milestones were not met, were significantly more likely to quit. Those assigned to receive free cessation aids plus \$600 in rewards for sustained abstinence from smoking also had higher quit rates.

The investigators published their findings in the *New England Journal of Medicine* earlier this year. ■

Strange But True...

Data breach? Philip Morris is developing a new smoking device called iQOS that could do more than deliver nicotine — it comes with two microchips capable of storing usage information and sending it back to the company, where it could then be used for marketing purposes. Philip Morris has denied it will use the chips in that way but a Canadian firm that reverse-engineered the device says it is possible. ■

Air-quality trains: Salt Lake City's light rail network does more than just transport people from place to place. The trains are also equipped with sensors that measure levels of pollutants in the air. The system is the first in North America to serve as a "transit-based mobile air-quality network." ■

Rock a bye: Michigan researchers have found a new way to soothe premature infants to sleep in their NICU: play them recordings of their mothers reading children's books. When they compared sleep patterns of infants with and without the recordings, they found babies were more likely to stay asleep when they could hear their mothers' voices. ■



Industry Update

Featuring information on products and equipment from manufacturers

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Dunne R et al. Aerosol dose matters in the Emergency Department: A comparison of impact of bronchodilator administration with two nebulizer systems. Poster at the American Association for Respiratory Care. 2016.

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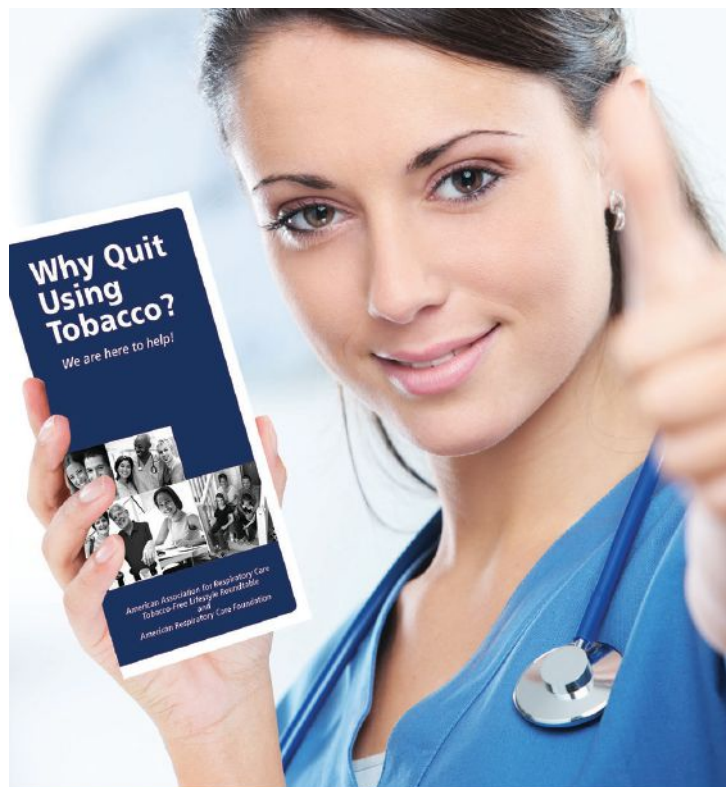
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