

The Coalition Chronicle

Coalition for Baccalaureate and Graduate Respiratory Therapy Education

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Spotlight Article

University of Michigan – Flint

Bachelor of Science in Respiratory Therapy Program

School of Health Professions and Studies

Public Health and Health Sciences Department

By Nicholas A. Prush, MHA, RRT, RRT-ACCS

Program Director & Clinical Assistant Professor

The University

The University of Michigan-Flint, part of the world-renowned University of Michigan, is a regional comprehensive university located in the heart of Flint, MI. UM-Flint is a vibrant and diverse learning community consistently recognized for academic distinction and superb value. Named as one of the “Best in the Midwest” by the Princeton Review for 16 consecutive years, UM-Flint offers more than 120 undergraduate and 35 graduate programs with a 13:1 faculty-student ratio. With flexible, personalized coursework enhanced by hands-on, engaged learning opportunities, UM-Flint students graduate ready to lead and succeed in all situations.

The University of Michigan-Flint has a long, distinguished history with a first-class academic reputation, and the School of Health Professions and Studies (SHPS) reflects this long tradition of excellence. SHPS is an active part of the community, with over \$9 million in external grants funding various projects and the Cultural Competencies Project that promotes diversity in the health professions. The University of Michigan-Flint offers a wide selection of off-campus health care resources giving students first-hand experience of the exciting challenges and rewarding opportunities that await. Students use contemporary tools and technology and graduates enter the field with one of the most highly respected degrees in the nation - a University of Michigan diploma.



The Program

The University of Michigan-Flint Bachelor of Science in Respiratory Therapy (BSRT) Program is a degree completion program designed for individuals who have graduated from a CoARC accredited respiratory therapy program with an associate degree. This unique program will be done mainly online, with the exception of the 48-hour advanced critical care and 40-hour professional specialty practicums. The program is designed to provide a natural transition from an Associate degree to a Baccalaureate degree and reflects the commitment by the respiratory therapy profession to increase entry-level standards to the baccalaureate level. The BSRT Program at the UM-Flint allows therapists the opportunity to study advanced respiratory care in

specialty areas such as critical care, disease management, and diagnostics. Additionally, graduates can gain employment as advanced clinicians, administrators, and educators. The program helps prepare students to sit for the Neonatal Pediatric Specialty (NPS), Adult Critical Care Specialty (ACCS), Registered Pulmonary Function Technologist Specialty (RPFT), and Sleep Disorders Specialty (SDS) credentials, all awarded by the National Board for Respiratory Care (NBRC).

The 50-credit hour program requires seven semesters (27 months) to complete (part-time) which includes didactic coursework (online), two practicums, and a capstone project. Admission into the program is on a rolling basis and students can start the program during Fall, Winter, or Spring semesters.

The Faculty



Nicholas A. Prush, MHA, RRT, RRT-ACCS, is the founding Program Director and Clinical Assistant Professor for the University of Michigan-Flint Bachelor of Science in Respiratory Therapy (BSRT) degree advancement program. Nicholas received his respiratory therapy training from Henry Ford Community College where he graduated with an AAS in 2003. He obtained his Bachelor of Applied Science (BAS) from Siena Heights University in 2008 and a Master of Health Administration (MHA) from Eastern Michigan

University in 2014. He is currently working on his dissertation for a Ph.D. in Healthcare Administration. Nicholas began teaching at Oakland Community College with their respiratory therapy program as an adjunct professor. Most recently, he taught at Monroe County Community College for seven years, four years as the DCE and three years as the Program Director. Nicholas is an active member in the Michigan Society for Respiratory Care (MSRC) where he serves as the Education Chair-Elect and is on the Sputum Bowl Committee.



Shane J. Spaulding, MHPE, RRT, is the Clinical Education Coordinator and Clinical Assistant Professor for the University of Michigan-Flint Bachelor of Science in Respiratory Therapy (BSRT) Degree Advancement Program. He obtained his respiratory therapy training at Monroe County Community College in Southeastern Michigan. He obtained his B.A. from the College of William and Mary and earned his MHPE (Health Professions Education) from Michigan State University. Before joining the University of Michigan-Flint, he

taught for seven years at the Monroe County Community College, three of them as the DCE for that program. Shane brings a student-centered, community engaged approach to his educational philosophy.



David L. Panzlau, MA, RRT, RRT-NPS, RRT-ACCS, is a faculty member in the Bachelor of Science in Respiratory Therapy Program at the University of Michigan-Flint. He taught for thirty-two years in the Associate Degree RT program at Mott Community College in Flint. He served as the Program Director for twenty-seven of those years. Upon his retirement, he was awarded Professor Emeritus status for his contributions to the program and college community. David helped lay the foundation for the BSRT program at UM-Flint and taught its first online RT class in the fall semester of 2017. He obtained his BS degree in Health Care Education in 1983 and his MA degree in Educational Leadership in 1991 from Eastern Michigan University. David first joined the AARC and MSRC (Michigan Society for Respiratory Care) in 1979 and continues to be an active member.



Sarah G. Parker, MAOM, RRT, RRT-NPS, is a faculty member of the Bachelor of Science in Respiratory Therapy (BSRT) Program at the University of Michigan-Flint. She is a Clinical Supervisor at C.S. Mott Children's Hospital - University of Michigan. Sarah received her respiratory therapy degree at Jackson College and completed the Neonatal/Pediatric Specialty. She obtained her Masters in Organization Management (MAOM) through Spring Arbor University. She has taught the Neonatal/Pediatric Respiratory Care course for the associate degree program at Jackson College for the previous six years and now teaches the Neonatal/Pediatric course for the University of Michigan-Flint BSRT program. Sarah is an active member in the Michigan Society for Respiratory Care (MSRC) House of Representatives where she serves as the Neonatal/Pediatric Chair.



Student Admission Requirements

The University of Michigan-Flint BSRT Program is seeking students who meet the minimum requirements for admission. The following is necessary for acceptance into our program:

- Associate degree from a CoARC accredited respiratory therapy program.
- Registered Respiratory Therapist (RRT) credential, awarded by the National Board for Respiratory Care (NBRC).
- Certification through the American Heart Association with Basic Life Support (BLS) for Healthcare Providers.

Sample Part-Time Curriculum

	Fall	Winter	Spring / Summer
Year 1	HCR 300 Health Care in the United States (3 credits)	HCR 376 Health Care Administration (3 credits)	HCR 304 Ethics of Health Care (3 credits)
	RSP 400 Advanced Adult Critical Care (3 credits)	RSP 405 Advanced Neonatal / Pediatric Care (3 credits)	RSP 410 Advanced Cardiopulmonary Diagnostics (3 credits)
Credit Load	6 credits	6 credits	6 credits
	Fall	Winter	Spring / Summer
Year 2	AGE 350 Health and Aging (3 credits)	PHS 347 Public Health Statistics (4 credits)	HCR 379 Introduction to Health Education and Health Promotion (3 credits)
	RSP 340 Quality Systems and Health Outcomes (3 credits)	RSP 315 Leadership & Professionalism in Respiratory Care (3 credits)	RSP 335 Research in Respiratory Care (3 credits)
	RSP 420 Advanced Clinical Practicum (2 credits)		
Credit Load	8 credits	7 credits	6 credits

	Fall	Winter	Spring / Summer
Year 3	RSP 330 Patient Education / Disease Management (3 credits)	RSP 320 Management Practices for Respiratory Care (3 credits)	
	RSP 435 Respiratory Capstone (3 credits)	RSP 430 Professional Specialty Practicum (2 credits)	
Credit Load	6 credits	5 credits	

Contact Information

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Program Director

Clinical Assistant Professor

Respiratory Therapy Program

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Professional Positions Posted at <http://www.cobgrte.org/professionalpositions.html>

*University of Hartford, *Georgia State University, *University of North Carolina – Charlotte, *East Tennessee State University, *University of Virginia Health System, *Texas State University, *University of Texas Health Sciences Center – San Antonio, *The University of Toledo, *Salisbury University, *Skyline College, *Boise State University, *Canisius College, *Boston Children’s Hospital, *Nova Southeastern University, *Northern Kentucky University, *Iman Abdulrahman Bin Faisal University.

“Believe in yourself and in the value of your profession.”

An Interview with Margaret F. Traband, MEd, RRT, FAARC

**Professor & Senior Vice Provost for Academic Affairs
The University of Toledo**

**Interviewed by Karsten Roberts, MS, RRT, RRT-ACCS
CoBGRTE Social Media Committee Chair**



Q. Tell us about your early days as a respiratory therapist. What brought you to the field?

A. My first exposure to an inhalation therapist was during my sophomore year in college. The enthusiasm that this individual displayed was captivating. They expressed deep satisfaction from their work and the ability to care for patients across hospital settings. I began volunteering in the Inhalation Therapy Department at a local hospital, one that I had previously volunteered at while in high school. I ultimately entered one of the two inhalation therapy educational programs available in Ohio, Cuyahoga Community College. It was there that I met one of the early presidents of the AAIT, Bernie Kew, RRT. I joined the AARC in 1972, that year I also became a Certified Inhalation Therapy Technician. The following year I passed my written and oral examinations and became a Registered Inhalation Therapist. My first job was at The Toledo Hospital, working the third shift. I was the first inhalation therapy school graduate hired in the hospital and the sixth Registered Therapist in the city. My first position was exciting and very humbling. I benefited from the years of experience my colleagues and the team spirit between inhalation therapy and the nursing staff. I learned much that first year working third shift in the Intensive Care Unit with our brand-new MA-1's.

Q. Who were your mentors? What did they contribute to your career?

A. I have been gifted with truly amazing mentors, Dr. Harold R. Stevens, was my first medical director and he spent countless hours coaching me, linking theory to practice. Dr. Jerome M. Sullivan has been a lifelong mentor who provided my first opportunity in an educational role. Gary A. Smith and Sam Giordano both played important mentoring roles while I served in leadership positions within the NBRC and the AARC.

Lessons that I learned from my mentors began with a focus on the patient, later in life that focus shifted to students. Do it right the first time. For if you don't have time to do it

right the first time, when do you think you're going to have time to do it over again? Doing the research, being prepared for the questions, learning to listen; all these lessons were not preached by my mentors, but practiced. Leading by example can best sum up my mentors.

Q. What prompted you to move into a leadership/education position?

A. My first venture into a leadership position was the result of saying yes. "Yes" to take on a challenge, "yes" to researching a problem, "yes" to accepting an opportunity. My first position as an educator was as a clinical instructor, a result of saying yes. Leadership and education are very similar as they are both about empowering others to achieve something of greater value.

Q. How did furthering your education contribute to your career path?

A. As a novice educator, I needed to build my understanding of how learners learn and how to be an effective teacher. My graduate work in educational psychology played an important role in my professional development. The work I did as a clinical instructor, director of clinical education and as program director all utilized concepts learned in graduate school. In graduate school, I learned to set measureable goals, construct reliable examinations and provide useful feedback, but it was as a respiratory care educator that I practiced and refined these skills. My interest in respiratory care education and measurable outcomes was fueled by my appointment to the National Board for Respiratory Care. The education I received while serving on the NBRC, working alongside dedicated therapists and physicians, was immense and intense. The opportunity to observe pioneers in our profession and their leadership skills assisted me in developing my leadership style.

Q. What are some key leadership lessons you have learned?

A. The first lesson I learned is that I am not singularly smarter than the group. All of us are smarter than any one of us. We all have blind spots and the only way we can compensate for this is to listen. We must practice active listening repeatedly. The second lesson is to value each member of the team, we do not all have the same gifts, but we all have gifts. Using the first lesson- listening- helps identify the gifts and the passion of the team members and allows them to contribute to the goal. The third lesson is to deliver what you promised. Failure after a halfhearted attempt tells us nothing. Failure after a genuine attempt tells us volumes.

Q. What would you recommend to new graduate therapists just beginning their career?

- Believe in yourself and in the value of your profession
- Take pride in your work and have compassion for those you treat
- Continue to seek new knowledge
- Share professional and disciplinary expertise with communities of interest
- Develop a career plan, modify as needed
- Develop your communication skills
- Actively participate in your professional organizations

**CoBGRTE Welcomes Gary Wickman as the
AARC Representative to the Board of Directors!**

**by Christy Kane, PhD, RRT, RRT-NPS, RRT-ACCS, AE-C, FAARC
CoBGRTE President-Elect and Membership Chair**



I am pleased to announce Gary Wickman, MS, RRT, FAARC will be the new AARC Representative to the CoBGRTE's Board of Directors (BOD). Gary is a faculty member at Seattle Central College. He retired recently as the Director of Respiratory Care Service at Providence Regional Medical Center in Everett, Washington. During his 34 years in practice, Gary has held numerous leadership positions including a director on the AARC Board of Directors, a member of the AARC House of Delegates, and Chair of the AARC Membership Committee. In addition, Gary has served as the President of the Washington Society for Respiratory Care. For the past two years, Gary has actively served on CoBGRTE's Membership Committee. Gary's leadership and expertise will be an asset to the CoBGRTE's BOD. Welcome, Gary!

The BOD thanks Peg Traband (see interview on pages 7-9) for her years of service as the former AARC Representative to CoBGRTE. Peg is the Senior Vice Provost for Academic Affairs at the University of Toledo. For the past two years, she has helped CoBGRTE's BOD build a stronger relationship with the AARC's BOD and Executive Office. We are extremely grateful for her insight and leadership. Thank you, Peg!

Recruitment Strategies that Work!

Gregg Marshall PhD, RRT, RPGST, FAARC, Texas State University

Paul Eberle PhD, RRT, FAARC, Weber State University

The CoARC 2016 annual report relates the average graduate rate for 4-year institutions of 16 graduates for the last academic year (CoARC, 2016 p. 61). The recent goal articulated by the American Association for Respiratory Care (AARC) to transition to baccalaureate degrees for entry-level practitioners requires rethinking how we recruit new students and develop ways to encourage increasing enrollment for programs in the future. The vision to increase advanced educational preparation recognizes a growing necessity for practitioners to function in an environment where growth in scope and complexity of clinical skills is needed in a variety of clinical sites. These include but are not limited to telemedicine, asthma educators, disease managers, critical care consultants, and COPD navigators. There continues to be need for critical thinking about the kinds and types of skills required for practitioners in the future. Respiratory therapists must be able to interact and function competently in a variety of circumstances and, increasingly, in advanced roles in critical care areas as well as home care and rehabilitation units. They must also be knowledgeable about reading and understanding research, continuing to learn and be familiar with evidence-based practices, and be able to critically judge and evaluate new and effective ways to treat disease. For that reason, the baccalaureate goal is increasingly gaining attention and many CoBGRTE colleagues are willing to set-up bridges or accept credits as “equivalents” to the RRT credential. At Weber State, we’re able to post up to 26 credit hours toward a baccalaureate degree saving an average of \$8,000 in tuition. Advancing education is a way to increase the scope and responsibility given to respiratory therapists in managerial roles in clinical practice and provide a way to continue both professional and personal growth in this ever-growing field.

One recruitment strategy is to encourage CoARC accredited base programs to facilitate and administer satellite programs of that base. Generally, a base program accepts 20 candidates (competitively selected from 60-70 applicants) that have met degree pre-requisite courses and interviewed to evaluate interpersonal communication. Acceptance leads to 20 AAS pre-professional students selected into the program each year. Additionally, 20 “professional” students continue with upper division credit hours leading to completion of requirements for their baccalaureate degree. Credential and licensure occur following graduation. Cohorts begin every fall semester and progress through the curriculum to completion of their degree. Attrition over the last 10 years has been less than 1%.

In January on “even” years, one satellite cohort submits an application and is selected at WSU-Davis campus 12 miles south of the main campus accommodating 16 students and

processed through the curriculum over the next five semesters to baccalaureate graduation. Again, credentialing and licensure occur after graduation. Another satellite begins in January of “odd” years at a Salt Lake City location, 35 miles south of the base program by selecting 20 students taught through five semesters culminating in a baccalaureate degree, credentialing, and professional licensure are achieved thereafter. Staggering students in such a way, serves to prevent too many students arriving for similar rotations, i.e., newborn ICUs, surgical ICUs, medical ICUs, or burn units at clinical sites. Weber State graduates’ students each fall and spring semester. This includes approximately 50 each year with a handful of BS completion students finishing requirements from previous cohorts or transfers from other programs. Over 80 students are accommodated in the program each year in bachelor’s preparation and twenty master’s candidates as currently configured.

New career opportunities are continually “popping up” as clinical managers are recognizing the unique qualities that respiratory therapists possess in their ability to recommend solutions and help care teams in disease management for their patients. Indeed, clinical roles as advanced practice RT’s are on the horizon as respiratory therapists serve both as capable care givers and assist managers in other roles attained through their advanced education. We must prepare ourselves and recruit competent practitioners for these expanding opportunities.

In 2010, when Weber State increased “entry-level” credentialing to a baccalaureate degree we had expected that qualified candidates would be scarce. Quite the opposite occurred, qualified applicants actually increased to 60-70 applicants for 20 positions annually in the program. Candidates are increasingly interested in master’s degree preparation with advanced practice to increase responsibility and autonomy in the field. Weber State is pursuing a clinical practice emphasis and a separate state statute in addition to our current respiratory care practice act with the help of our advisory committee and the assistance of the largest health provider, Intermountain Health Care to grow our applicant pool. In the last 10 years we have lost 32 practitioners to the physician assistant ranks and would rather keep them learning and growing as respiratory therapists with increased responsibilities as advanced practice respiratory therapists (APRT). Education is a way to learn and grow inside the profession. So, our recruiting strategy is to enhance pathways for practitioners to continue to “learn” and pursue advanced education opportunities. Advanced education is but a stair-step away to added responsibility, increased visibility, and mid-level roles in “team-based care models” for the future.

Across the country from Utah, Texas State University is one of five entry-level baccalaureate programs in the state along with one master’s degree entry-level MSRC program and 32 associate degree entry-level programs. Recruitment has always been an essential element of growing both numbers and quality in preparing new respiratory care practitioners for the future. Our respiratory care program was the first to be implemented in the College of Health Professions in 1972 at Texas State and has played a key role in educating many practitioners. It is with a great sense of pride that one may find graduates of our program in many key

management positions and serving as faculty throughout the 37 total programs in the state. As is often the case, the national interest in healthcare seems to wax and wane in response to the economic state of the country and the booming “it” career of the moment. However, as healthcare providers we know that healthcare is vital, essential, and perpetual.

The BSRC Program at Texas State has always enjoyed large cohorts of 30-45 through the years, but in 2002 we noticed a decline in the applicant pool. As educators, we all know the importance of a diverse applicant pool and the opportunity to bring the best and brightest women and men to the workforce. During this time, the State of Texas instituted a mandate to reduce all baccalaureate degrees in public universities to 120 hours. At that time, our BSRC program required 140 hours. This cut in degree hours was quite devastating to us as we were told the reduction in hours must only come from our major courses and not the general education core. As we combined courses and reduced the credit value for clinical courses (while still requiring the same number of clinical clock hours), we began looking for ways to attract prospective students interested in “healthcare” but were undecided as to which career to pursue. As a faculty, we decided to take our “Introduction to RC Fundamentals” lecture course, which was one of our first semester theory courses out of the 120-hour degree, out of our degree required sequence. We reduced the intro course from a three semester-hour course to a two semester-hour course and offered it as a “Introduction to Respiratory Care” course. We promoted the course as a “no-obligation, look-see” course to introduce the respiratory care profession to interested healthcare-oriented students. I personally developed the course by simplifying and generalizing concepts taught in the original course and added the history of respiratory care along with the potential opportunities that subspecialties bring to a career. I also took the opportunity to bring in seniors from our BSRC Program to talk to the class about their educational and clinical experiences along with job opportunities waiting for them.

Key to the success of the new course, was to win the favor and support of our Academic Advisors who were advising all “pre-healthcare” majors. This large group included those interested in nursing, physical therapy, speech-language, radiation therapy, and clinical laboratory science. Many of these students were seeking more face-to-face understanding of the options in healthcare and this course seemed attractive to them in many ways. The “no-obligation” aspect appeared to disarm concerns of having to choose this particular career. With the course being taught every spring semester face-to-face and every summer as an on-line course, the response has been amazing. I have had as many as 120 students in this intro class in the spring semester. During the course, I take the opportunity to thoroughly cover the application process and requirements. Since introducing this course, we have typically had 70 to 125 qualified applicants to review for our cohort of 44 students. Indeed, there have been many years that I desperately wished we could have taken “just the next 5 students!” As we saw many excellent students not able to join our cohort, I began including information about the other four BSRC programs in the state and encouraging students to apply for more than one program. Our

numbers of students not accepted into the program have grown to the point that our Provost has requested the College of Health Professions to develop and implement a Bachelor of Science in Health Sciences (BSHS) to provide a pathway for those with a continued interested in healthcare.

Although the “Intro to Respiratory Care” course is in our respiratory care course inventory, it is not inside our 120-degree hour program. I have asked the academic advisors to state, “although it is not required, it is HIGHLY recommended.” As professor for this course, I enjoyed the opportunity to boast about the respiratory care profession, invite students to investigate the profession by studying our scope of practice along with the subspecialties, and require them to demonstrate some math skills along the way as they calculate partial pressure and apply it to the alveolar air equation!

Indeed, this recruitment process has provided us with the opportunity to invite highly qualified students to the profession and to educate others about the importance of our profession. Many times, I have had students come to me at the end of the semester telling me although they are pre-nursing or other pre-health professions, they are leaving with a very profound appreciation for and understanding of the important role respiratory therapists play in the healthcare provider team. After all is said and done, that may just may be the most important outcome of this course.

Recruitment and Program Development

**Thomas A. Barnes, EdD, RRT, FAARC
Northeastern University
Boston, Massachusetts
CoBGRTE Immediate Past-President**



Drs. Paul Eberle and Gregg Marshall were invited to share their success stories on student recruitment for their BSRT programs to encourage smaller BSRT programs to increase their enrollment. Collectively, the BSRT and MSRT community of educational programs need to graduate more students. As Paul Eberle mentions above, the mean number of graduates is only 16/year. Imagine the impact on the field if the mean was 50/year. Other healthcare programs such as physical therapy, nursing and pharmacy programs graduate 50 to 150/year. What will it take for respiratory care programs to achieve this goal?

First, we need to change the mind set of BSRT and MSRT program directors from “can’t do it” to “must do it.” I have heard all the excuses on why programs cannot increase in size. Part of the “mind set” is they recruit only to fill a local community need and focus their attention on students that live near their campus. A more global outlook is needed, starting with recruiting to

fill state and national manpower needs. I have had several students complete the Northeastern University Master of Science in Respiratory Care Leadership from Singapore, Saudi Arabia, and Canada. These students have earned their BSRT degrees in the USA and Canada. Finding ways to make your RT program available to international students will help you increase your enrollment. How do you improve the scope of your recruitment effort and speak to value of earning a BSRT or MSRT degree?

The AARC, CoARC, and NBRC have recently added value to earning an advanced degree in respiratory care by establishing a special web page (<http://www.aarc.org/education/educator-resources/transitioning-associate-to-baccalaureate-degree-program/>) that provides resources for transitioning ASRT to BSRT programs (AARC), publishing position statement recommending that entry into the field should be at the baccalaureate or graduate level (AARC), requiring all new programs to offer a BSRT or graduate degree (CoARC), establishing collaborative task force with representatives from AARC, CoARC, NBRC, CoBGRTE, NN2, and NA2RC to find ways to increase the number of BSRT and MSRT programs (AARC) and have prepared a list of reasons why someone should take the time and money to earn a BSRT or MSRT degree (AARC and NBRC). The financial advantage, as provided from the 2014 AARC Human Resource Study, should be an important part of your recruitment materials and is provided on page 15 with permission of the AARC and Dr. Robert Shaw, NBRC Vice President-Examinations, who prepared the information for the AARC. The information answers the question of whether earning an advanced RT degree is worth the time and money.

How will increasing the size of your program help you and other RT faculty members? Programs with larger enrollment can afford to hire more than only two or three faculty members to teach the courses in their curriculum. Faculty will have additional time to do research and involve their students in research courses and activities. They have time to contribute to the profession by, serving on state and national committees, writing in the scientific literature, and mentoring students as role models for professional service. Larger programs can afford to have a higher salary scale and thus attract better qualified faculty members. The faculty team is larger and the opportunity to interact with each other is an added benefit. The constant threat of program closure no longer exists, and they have a tuition stream that makes the program financially stable.

In conclusion, bigger is better for everyone, students, faculty members, employers and your college/university and the profession. Accordingly, read carefully the success stories told by Eberle and Marshall, use the resources provided by the AARC and CoBGRTE, and leave that old small program “mind set” behind.

The information below is provided with permission from the AARC web page *Transitioning from an Associate Degree Program to a Baccalaureate Degree Program* at <http://www.aarc.org/education/educator-resources/transitioning-associate-to-baccalaureate-degree-program/>

Summary of 2014 Human Resources Survey data related to earned degree and compensation

Direct Effect

The 2014 study of human resources conducted by the AARC showed that each step up in one's degree level was worth an average of \$3,071 a year while controlling for other variables that influenced compensation like experience, hours worked, and credentials. For those who were paid by the hour, each education level was valued an additional \$1.48 per hour on average (\$3,071 per year/52 weeks per year/40 hours per week). While these were average values and a few exceptions were expected, institutions that did not compensate therapists more for higher education levels were out of step with what most institutions did.

Indirect Effect

If access to the jobs listed below was eased for those with higher education levels, then the following compensation differences should be noted. Each value in the list was the difference between the average annual compensation for a therapist in each position and the average (\$52,758) for those in the staff therapist position:

- Clinical Specialist +\$3,792
- Industry Representative +5,361
- Research Coordinator +\$6,082
- Supervisor +\$10,632
- Director +17,615

Conclusion

Individuals who hold higher degrees should expect higher compensation. When a higher degree is coupled with a job tied to more selective criteria, then the expectation for higher compensation should be magnified.

Source:

Shaw RC, Benavente JL. AARC Human Resource Survey of Respiratory Therapists. AARC, 2014.



CoBGRTE 2017 Research Scholarship

**By Corey Noles, BS, RRT
MS Respiratory Care Program
Samford University
Birmingham, Alabama**



I applied for the CoBGRTE research scholarship to investigate two applications of one group of substances known as essential oils for patient benefit. Essential oils (EOs) are combinations of volatile compounds and numerous chemical components that have long been used to induce various effects on the body. It is known that EOs induce their effects through neurological (central nervous system via the olfactory nerve) and pharmacological (through the bloodstream) pathways (Horváth & Ács 2015). Recently, more work has been conducted to study the effects of EOs on the respiratory system, particularly as it pertains to respiratory infections and the inflammatory response in asthma. Lavender oil (LO) is thought to alleviate symptoms of bronchial asthma through the attenuation of the inflammatory cell response and mucous cell hyperplasia. A study by Ueno-lio and colleagues found the inhalation of lavender oil in mice to reduce the number of eosinophils and total white blood cell count in bronchialalveolar lavage fluid, reduced levels of IL-4, 5, and 13 in lung tissue, and reduced Muc5b expression in lung tissue. However, studies have yet to replicate these results in mice models, and the lavender oil was inhaled over a period of days before data was collected (Ueno-lio, et al, 2014). Although human use of various types of EOs is common, it is not known if lavender oil can attenuate the inflammatory and the hyperreactive airway response in humans.

My research seeks to investigate two questions: 1) Does the inhalation of lavender oil produces a rapid improvement in breathing effort (e.g., less airway resistance, improved FEV1, FEV1%), and 2) does short-term exposure to a mixture of EOs (lavender, tea tree and eucalyptus) inhibit bacterial growth on human tracheal cells (cultured). A third outcome I hope to attain is an estimate of the amount of EO inspired for a specific time of inhalation using the diffusion method of my protocol. To date, our work will be the first to estimate the EO concentration via inhalation with a lung simulator and ventilator, and will hopefully serve as standard for estimating the EO concentration via inhalation for further research to come. I am quite fortunate to conduct research with both human subjects and learn laboratory procedures involving cell cultures. My mentor says this experience and the publications that will come from it will open doors to future opportunities to participate in research as I begin my career in respiratory care. The CoBGRTE research scholarship has certainly been advantageous in allowing me to purchase items needed for my experiments. Without the aid of this scholarship, attempting the full scope of what I proposed would have been challenging.

Chest Appoints Liaison to CoBGRTE



The Coalition of Baccalaureate and Graduate Respiratory Therapy Education (CoBGRTE) is pleased to announce a liaison from the American College of Chest Physicians (aka CHEST) has been appointed. Jonathan Waugh, PhD, RRT, RPFT, FAARC was recommended by members of the CoBGRTE Executive Committee and CHEST Respiratory Care NetWork Steering Committee chair David Bowton and member Russ Acevedo, and approved by CHEST President, John Studdard. A note of clarification, the College can be referred to as The American College of Chest Physicians, or simply CHEST, they no longer refer to the College as "ACCP."

Liaison responsibilities include reporting to the CHEST Board on activities related to CoBGRTE, attending the CHEST respiratory care liaisons meeting, attending the CoBGRTE annual board of directors meeting and teleconference meetings, attending CoBGRTE roundtable discussion dinners at the AARC summer forum and annual congress, and serving as a conduit between CHEST and CoBGRTE to ensure timeline and accurate communication of the respective needs of each group.

The CHEST Respiratory Care NetWorks Steering Committee is composed of Chair David Bowton, MD, FCCP, Vice-Chair Carl Kaplan, MD, FCCP, Uma Ayyala, MD, Thomas Fuhrman, MD, MS, FCCP, Douglas Masini, RRT, EdD, FCCP, Herbert Patrick, MD, MS, FCCP, Robert Pikarsky, RRT, MBA, FCCP, Donna Tanner, RRT, David Vines, MHS, RRT, FCCP, Jonathan Waugh, PhD, RRT, RPFT, FAARC, Amanpreet Kaur, MD, De De Gardner, DrPH, RRT, RRT-NPS, FAARC, FCCP, Kevin O'Neil, MD, FCCP and Maggie Kosinski.

Respiratory Therapists are welcome to attend CHEST annual meetings and submit abstracts for presentation. Full information can be found on the CHEST website: <http://chestmeeting.chestnet.org/>. The program has been approved for 38.75 contact hours of Continuing Respiratory Care Education (CRCE) credit by the American Association for Respiratory Care. CHEST annual meetings have incorporated highly popular simulation training labs for several years that allow attendees to try practice of advanced procedures and therapies under realistic virtual conditions.

Respiratory therapists are invited to submit manuscripts for publication in the CHEST journal. More details on the journal can be found on the following website: <http://www.chestnet.org/Publications/CHEST-Publications/CHEST-Journal>

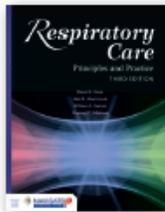
CHEST members have access to many free clinical tools and educational materials and receive discounts on other educational resources. Respiratory therapists are also eligible for nomination to become a Fellow of the College.



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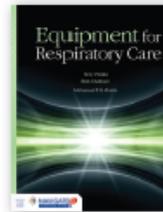


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If you haven't already decided to become a CoBGRTE member after visiting www.cobgrte.org, the following are 14 reasons why you should join the coalition.

Reasons Why You Should Become a CoBGRTE Member

1. Award scholarships to baccalaureate and graduate respiratory therapy students.
2. Assist in the development of ASRT to BSRT Bridge Programs.
3. Collectively work towards the day when all respiratory therapists enter the profession with a baccalaureate or graduate degree in respiratory care.
4. Support a national association, representing the 63 colleges/universities awarding baccalaureate and graduate degrees in respiratory care, to move forward the recommendations of the third 2015 conference.
5. Help start new baccalaureate and graduate RT programs thus leading to a higher quality of respiratory therapist entering the workforce.
6. Work to change the image of the RT profession from technical-vocational-associate degree education to professional education at the baccalaureate and graduate degree level.
7. Mentoring program for new graduates as well as new faculty members.
8. Join colleagues to collectively develop standards for baccalaureate and graduate respiratory therapist education.
9. Develop public relations programs to make potential students aware of baccalaureate and graduate respiratory therapist programs.
10. Help to publicize, among department directors/managers, the differences between respiratory therapists with associate, baccalaureate and graduate degrees.
11. Access to over 45 Spotlight articles on BSRT and RT graduate programs, and major medical centers.
12. Round table discussion dinners and Meet & Greet member receptions held in conjunction with the AARC Summer Forum and the International Congress.
13. Help to support maintaining a roster and web site for all baccalaureate and graduate respiratory therapist programs.
14. Collaborate with CoARC and AARC to improve respiratory therapy education.

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