

The Coalition Chronicle

Coalition for Baccalaureate and Graduate Respiratory Therapy Education

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Spotlight Article

San Francisco General Hospital



The Zuckerberg San Francisco General Hospital (SFGH) as seen from Bernal Heights, with the southeastern part of the Mission District in the foreground, and Potrero Hill and the Bay Bridge in the background toward the left

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Brief History of San Francisco General Hospital

San Francisco General Hospital (SFGH) was established in 1857 in response to numerous public health crises during and after the California Gold Rush of 1849. SFGH is one of the oldest public hospitals in the United States primarily serving the city's medically vulnerable population.¹ For over 160 years, SFGH played a pivotal role during numerous epidemics and disasters, including the bubonic plague (1900-04), the great earthquake (1906), the great influenza pandemic (1918), the Polio epidemic (1947-54), the AIDS epidemic, the Loma Prieta earthquake (1989) and the 2013 Asiana Jet Crash.

SFGH has been a world leader both in the treatment of and research into tuberculosis and acquired immunodeficiency syndrome (AIDS). This included the first modern tuberculosis hospital built in 1919, and the first AIDS clinic and inpatient AIDS ward established in 1983. SFGH was the *de facto* center for treating severe trauma beginning in the 1930s. In 1968 SFGH developed the first integrated trauma system in the United States. Since then, it has garnered international renown for its comprehensive trauma care and research. The first ICU was established at SFGH in 1966 and evolved over the years into separate trauma-surgical, medical, cardiac and neonatal units.

Respiratory Care Services

Respiratory care services (RCS) was established in 1972 under the medical direction of the University of California, San Francisco (UCSF) Department of Anesthesia. It consisted of five members whose function was equipment dispensing and cleaning. In 1975 the arrival of Eric Gjerde (an RT supervisor from the University of Florida) as technical director, and a new medical director (Dr. Richard M Schlobohm) marked the department's transformation from orderly-level service into a highly skilled professional service.

Eric's first action was to hire only RRT-credentialed (or eligible) therapists. He then won approval to change the name from inhalation therapy to respiratory therapy to signify the scope of practice he and Dr. Schlobohm envisioned. At the time Eric was an NBRC oral examiner and he conducted employment interviews in the same manner (a practice that continues today). Eric's



Fig 1. Dr. Schlobohm reviewing study data the old fashion way (circa 1972)

interview of Kevin Corkery was a memorable example. Eric noticed that in addition to Kevin's respiratory therapy degree, he also had a master's degree in marine biology. What transpired next became departmental lore: *"Eric asked me what settings would I use to ventilate a dolphin? And would I intubate it through the mouth or blow hole? That one really threw me but I did my best to answer it and I got the job!"*

Under Eric's and Dr. Schlobohm's leadership, the department's scope of practice expanded whereby therapists

performed cardiac output/vascular resistance and intrapulmonary shunt studies, PEEP-VT compliance titration grids (the nascent version of lung-protective ventilation),² measured

physiologic dead-space, and performed indirect calorimetry. This expanded scope of practice necessitated creating an education coordinator position to ensure the maintenance of clinical competencies for these advanced procedures (see below). Over the following decades, respiratory care expanded into a full range of in-patient and out-patient respiratory care.

Participation in Clinical Research

The mid-1970s also marked RCS's involvement in clinical research that emanated from two factors. First was Eric's previous experience at the University of Florida working with Dr. John Downs during the development of IMV and super-PEEP.³ Second was the prolific physiologic research on the effects of mechanical ventilation by Dr. H Barrie Fairley at SFGH. 's work

The department's involvement in clinical research continued into the 1980s. Most notably was Kevin Corkery's work as coinvestigator in developing aerosolized pentamidine therapy during the early years of the AIDS epidemic.⁴ In 1996 UCSF/SFGH became one of ten centers comprising the NIH ARDS Clinical Trials Network. SFGH-RCS subsequently co-authored two ARDS Network sub-studies: one on lung-protective ventilation and the generation of intrinsic PEEP⁵ and the other on physiologic dead-space and mortality in ARDS Network subjects.⁶ The department also collaborated with the UCSF Cardiovascular Research Institute on the seminal study of physiologic dead-space and mortality in ARDS,⁷ and the first study demonstrating the hydrostatic mechanism causing negative pressure pulmonary edema.⁸ SFGH-RCS-initiated studies during this time included the effects of mechanical ventilation on work of breathing in ARDS,⁹⁻¹² and the first pragmatic description for aerosolized prostacyclin delivery during mechanical ventilation.¹³ Since 1975, 15 members of SFGH-RCS have authored (or coauthored) over 180 abstracts and over 90 peer-reviewed papers in 18 journals including: Lancet, New England Journal of Medicine and Thorax.

Clinical Research in the Advancement of Respiratory Care: The Interplay of Role Modeling, Mentorship, Happenstance and a Clinical Education Program

Example is not the main thing in influencing others. It is the only thing.

Albert Schweitzer

A recurring theme in preparing this article was the role of mentors: not simply those whose passion and mastery motivated us, but those *who noticed us*, recognized our talent and eagerness, and in response took an interest in us at a formative period in our lives. For Eric Gjerde it was his relationship with Dr. Downs. Because of that relationship, Eric was motivated to come in on his days off to help with mechanical ventilation studies.

The experiences of Roger Kraemer, an original department member, and the first to become involved in research at SFGH, illustrates this interplay. For Roger, it began with his high school physics teacher who spent time after school developing Roger's critical thinking skills as well as

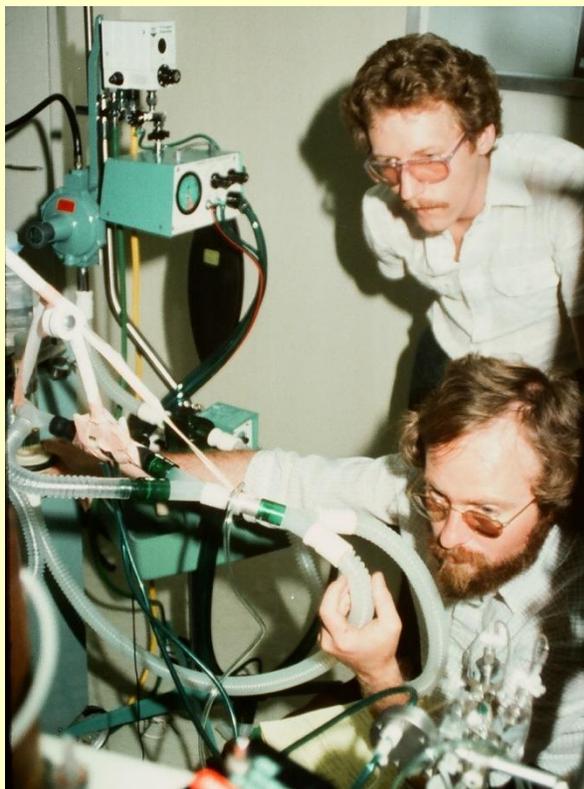


Fig 2. Roger Kraemer (standing) and Eric Gjerde (kneeling) testing a new demand flow CPAP delivery system (circa 1976).

his creativity and curiosity. Rather than approaching class assignments by reading the material in advance, Roger was encouraged instead to think about how to approach solving the puzzle of how things work. Roger's inquisitiveness served him well when he joined the inhalation therapy department at Massachusetts General Hospital in the 1960s (then the premier center for mechanical ventilation research). Roger's curiosity and interest motivated him to stay after his night shift to attend ICU rounds. In so doing, Roger came to the attention of Dr. Henning Pontoppidan who started the first ICU in the United States, was a pioneer in mechanical ventilation research; and was widely known for his love of teaching and mentoring. Roger's experiences at MGH (and his relationship with Dr. Pontoppidan) gave him immediate credibility with Dr. Schlobohm when he came to work at SFGH a few years later.

Early on Roger was asked to help an anesthesia research fellow from Switzerland

design the first helium dilution technique for measuring FRC during mechanical ventilation. The research fellow was Dr. Peter Suter and his novel technique was indispensable in producing the seminal studies he performed on optimal PEEP,¹⁴ the effects of pure oxygen on pulmonary perfusion and absorption atelectasis,¹⁵ and (with Dr. Jeffrey Katz) the effects of PEEP on the time course of FRC changes: the earliest, most comprehensive description on alveolar stabilization versus recruitment in ARDS.¹⁶ A subsequent bench study with Dr. Katz and Eric Gjerde highlighted the problem of poor trigger sensitivity during assisted ventilation,¹⁷ and stimulated subsequent research in solving one of greatest limitations of mechanical ventilation at that time.

Kevin Corkery majored in marine biology both as an undergraduate and in graduate school. By coincidence in the spring of 1974, the RT director of local hospital in Tampa visited the biology department to inquire whether any students might be interested in a summer job as on-the-job trainees. Kevin took the job and thus a chance encounter evolved into life-long career in respiratory care research. Kevin always gravitated towards research: "*I did some marine*

research while I was at Tampa and did some more while at Humboldt [State University] so I was always interested in research. After I left SFGH the first time I worked at Children's Hospital Oakland as the PFT lab manager and did some PFT-related research on babies. I also did some of the original research calibrating pulse oximeters for Nellcor. In 1983 I accepted an offer to return to SFGH as assistant director, but my only condition was that I could continue to do research. After my return I did a study comparing jet nebulizers to MDIs in the ED and then with Dr. Bruce Montgomery I did the original studies with aerosolized pentamidine."

Role models and mentorship played a crucial role in my career beginning as a student. Jack Procita, who taught respiratory physiology at SUNY Upstate Medical University in Syracuse NY, was instrumental in my career and his scholarship was inspirational. It coincided with my mechanical ventilation course where Dr. Suter's Optimal PEEP study was emphasized. These



Fig 3. Dr. Peter Suter performing study measurements during the Optimal PEEP study (circa 1973).

two events left an indelible impression that began my fascination with physiologic dead-space and ARDS pathophysiology. During my senior year I took an elective course on applied research where I assisted on a laboratory study of enflurane which I enjoyed immensely. In 1981, I moved to San Francisco to work at SFGH because I wanted to be in a clinical environment on the cutting

edge of mechanical ventilation research. My first research experience came in 1987 when Kevin Corkery invited me to assist Dr. Katz with a study on ventilator modes and work of breathing. Like Eric, Kevin and Roger before me, I found the experience fun, challenging and exciting. Although the work of breathing study was never completed, I subsequently pursued it as my master's thesis at San Francisco State University in the mid-1990s and later published the results in *RESPIRATORY CARE*. In addition to Roger, Kevin, and Dr. Katz there were other important mentors including Drs. John Luce and Michael Matthay from my time working with the NIH ARDS Network who helped to shape my research career.

An environment where research is prominent creates a culture whereby the institution itself becomes a quasi-role model. Mark Siobal (former director of RCS) hinted as much when he reflected on his research experiences. *"Essentially being surrounded by a culture of ongoing research from the moment I started working at SFGH/UCSF and the realization that many monumental developments in our field, such as George Gregory's invention of CPAP and John*

Severinghaus's creation of the CO₂ electrode (up at the main UCSF campus), and the work here at SFGH by Peter Suter on Optimal PEEP, Jeff Katz on work of breathing measurements, Dr. John Murray's creation of the lung injury score, and our own Roger Kramer's pioneering work on ventilation waveform graphics in the mid-1980s were my motivations for continuing the legacy of research and investigation throughout my career. I am so thankful for the support, encouragement, mentorship, and the academic research culture I was exposed to. You learn and do what you see around you."

It was Mark who first invited local students and some of our new therapists to assist him on research projects. After Marks departure, I was asked to continue departmental research training initiatives as part of staff development. Several of my young research colleagues whom both Mark and I mentored have shared their thoughts on how research affected their professional lives.

The experiences of Justin Phillips and Greg Burns speak to the institutional environment as a quasi-role model. For Justin: *"When I started working as a therapist, I quickly realized that to survive in a culture filled with brilliant individuals I'd have to do more [than just get by]. Talking the talk and walking the walk forced me to immerse myself in the literature."* An



Fig 4. SFGH-RCS research team (circa 2017). From Left to right: Vivian Yip, Lance Pangilinan, Justin Phillips, Rich Kallet, Greg Burns and Kelly Ho.

outcome of this for Justin was *"when it comes to things that spark my interest, I've become kind of an extremist, meaning I'm going to pursue something 110%, all the way. That's probably helped me as well."* For Greg Burns: *"when I got hired at SFGH I was awed by the research going on within the department. It rekindled my appreciation for respiratory care and motivated me to apply my desire to learn more and do more to assist with research. Participation in*

research was fulfilling ... I felt engaged with the process that was largely attributed to our Open Forum presentations at the AARC congress ... research at SFGH transformed my career. I am now pursuing a master's degree in epidemiology and clinical research at UCSF."

Kelly Ho joined the RCS research team which was a natural evolution of her academic studies and a wonderful opportunity. *"Working with research definitely helped me to better explain our protocols and the theory and evidence behind them [to physicians and other members of the healthcare team] and do it more confidently. In fact, I think therapists in any teaching institute should at least touch on some research work, especially those who precept new hires."* Similar to Greg's experience, Kelly reminisced that presenting at Respiratory Care journal's Open Forum *"was one of the most breathtaking moments of my life" ... when I first saw my name appear on publications, I felt extremely accomplished, it's not something that happens to everyone. It's something that I'm very proud of and I plan on using to inspire my children."*

The institutional experiences of these young clinicians suggests that, not only does the institutional culture act as a role model motivating clinicians to aspire to a higher level of professionalism, but the AARC congress itself (particularly the Open Forum abstract sessions) acts to reinforce those aspirations: with the presenters themselves unwittingly serving as role models to those in attendance.

Earlier I intimated that creating an expanded scope of practice for respiratory therapists at SFGH made it apparent that the long-term success of the department's cutting-edge stature prompted the creation of a clinical education coordinator position. That position was needed to both to train new employees and also maintain a high degree of performance among existing staff. This theme was expressed by our current clinical education coordinator Laura Martin: *"Many clinicians who have come to work at SFGH voiced how impressed they were that we had a lead educator and a strong program that was sorely lacking at their previous jobs. They definitely felt the need for all departments to have such positions. Frankly, when I think about everything RCS is responsible for: the modalities, equipment, protocols and how all of this is implemented, it would be a disservice to the new staff member, the patient and the hospital not to have an appropriate education program in place. Providing the proper orientation gives the tools that insures a path of success for new team members for a solid career within the department."*

At its core, respiratory care is a technology-driven profession. The constant innovation along with evidence-based protocolized care practices reinforces the importance of ongoing clinical education as a permanent fixture within RCS departments. Both technological advancements and quality-assurance data collection associated with protocolized, outcomes-oriented care forms the nexus between RCS departmental research initiatives and continuing education. In the previous issue of this newsletter Ednalee Warnecke (my research colleague and former clinical education coordinator at SFGH) observed and validated this need for our profession in the 21st Century:

*“Respiratory therapists are expected to critically analyze research papers, synthesize the results and be able to put forth a policy, procedure or protocol for their department to employ. The truth is many studies aren’t executed well or don’t utilize the correct statistical tests on their data. To appreciate these flaws, RTs must have a basic understanding of statistics as well as the research process.”*¹⁸

Participation in clinical research also opens the door for career advancement. After leaving our department in 1985, Eric Gjerde became the first American employee for Hamilton Medical and guided the Veolar ventilator through the FDA approval process. In 1997 Eric started Airon: Corp.: makers of the pNeuton ventilator. Kevin Corkery went to work at Genentech on aerosolized DNase therapy for cystic fibrosis. He continued his research career at Nektar Therapeutics and Novartis to become one the leading authorities in the field of aerosolized medicine. And after retirement, Mark Siobal has continued to pursue his research interests as a consultant to both Aerogen and Nektar Therapeutics.

Finally, the story of SFGH-RCS research is imbedded in a particular historical epoch when academic departments were better able to directly support faculty-initiated research. This helped facilitate our participation as clinical research assistants (albeit mostly in a volunteer capacity). In particular, the prevalence of bedside physiologic research studies in the 1970s and 80s created a close relationship between physician researcher and respiratory therapist research assistant. This in turn provided more intense and well-guided learning experiences for the therapist. Times have changed and the current opportunities for respiratory therapist participation in research has changed with it. However, evolving technology (including the availability of highly sophisticated lung modeling) and protocolized, outcomes-based prospective clinical trials (as well as their clinical implementation), have created new albeit different opportunities. What remains constant is motivated, creative, and intellectually thirsty therapists willing to seek out opportunities in pursuit of becoming researchers.

Figures/Photo courtesy of: Page 1 SFGH (Wikipedia), Figures 1-3 (Dr. Scholobohm), Figure 4 (Richard Kallet)

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Contact Information

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Professional Positions Posted

<http://www.cobgrte.org/professionalpositions.html>

*University of North Carolina-Charlotte, *University of North Carolina Wilmington,
*Norton Healthcare, *University of Virginia Health System

[ASRT to BSRT & MSRC Degree Advancement Programs](#)

[BSRT and MSRT Entry Programs](#)

[Graduate Respiratory Therapist Programs](#)

www.CoBGRTE.org



SUNY Upstate Medical University Class of 2021
(Photo taken before COVID-19)

Front L-R: Allat Badwan and Terel Oselmo; Back L-R: Kristina Boucher, Rachel Whitcomb, Jessica Collins, Crystal Current. Shahad Damlakhan. Tzina Klein, Brenda Mower, Bill McLaughlin, Chris Pitts, Jake Naples, and Jacob Ngawi

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A Loss to the Respiratory Care Profession



On Monday September 7, 2020 the CoBGRTE Board of Directors were shocked and saddened to receive word of the passing of a long-time friend and colleague - Tom Malinowski, MSc, RRT, FAARC. Tom was an outstanding leader, researcher, scholar, educator and mentor to younger RRTs and has a long list of accomplishments. Below is only a partial list of his many career accomplishments. His level of commitment is a role model for younger RRTs to appreciate and hopefully continue in Tom Malinowski's footsteps, he will be missed!

Professional Education

- June 2014 Northeastern University, Boston, MA, MSc in Respiratory Care Leadership.
June 1980 Loma Linda University, Loma Linda, CA. BS in Respiratory Therapy, Management emphasis.
May 1978 University Southern Colorado, Pueblo, CO. A.A.S. in Respiratory Therapy.

Professional Leadership Appointments

University of Virginia Health System – July 2015 – 2020 Charlottesville, VA
Director, Pulmonary Diagnostics and Respiratory Therapy Services (Sleep Disorders Center, Pulmonary Function Laboratory, Respiratory Therapy).

Mary Washington Hospital - Nov 2007- June 2015 Fredericksburg, VA
Director, Cardiopulmonary Services (Respiratory Care, Pulmonary Diagnostics, Pulmonary Wellness, Cardiopulmonary Rehabilitation, Cardiac Stress, Diagnostic Cardiology, Central Telemetry, Echocardiography).

INOVA Fairfax Hospital System – Aug 2001-Oct 2007 Fairfax, VA
Director, Respiratory Care Services, Inova Fairfax Hospital/Inova Fairfax Hospital for Children/Inova Heart and Vascular Institute

Loma Linda Univ. Medical Center – Aug 1978- Aug 2001 Loma Linda, CA
Administrative Director, Respiratory Care, Sleep Disorders, Neurodiagnostic Services, Loma Linda University Medical Center (LLUMC).

Director, Respiratory Care Services (LLUMC). December 1998 – September 2000

Clinical Director, Respiratory Care Services (LLUMC). May 1994 – December 1998

Assistant Director, Respiratory Care Services (LLUMC). August 1984 - May 1994

Professional Service

- 2020 CoBGRTE Board of Directors
2014 VSRC, President

2009-10 VSRC, Delegate, AARC House of Delegates
2005 VSRC, President
2003 VSRC, Vice-President
1995-96 CSRC, President
1992-94 CSRC, Vice President, Program Committee Chair

Original Research Articles

Rowley D, **Malinowski T**, Di Peppe J, Sharkey R, Gochenour D, Enfield K. A randomized controlled trial comparing the effectiveness of lung expansion therapy following upper abdominal surgery in adult human subjects. *Resp Care* 2019;64(10):1121-1192 doi: 10.4187/respcare.06812. Epub 2019 May 21.

Dailey R, **Malinowski T**, Baugher M, Rowley D. Impact of a respiratory therapy assess-and-treat protocol on adult cardiothoracic ICU readmissions. *Resp Care* 2017;62 (5):517-523.

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Research Review Articles

Malinowski T Quality and performance improvement in respiratory care. *Resp Care Clin of North Amer* 2004;10(2):235-251.

Thalman J, **Malinowski T**. Balanced scorecard methodology for total performance improvement. *Resp Care Clin of North Amer* 2004;10(2):253-268.

Research Abstracts (n=41, only three shown below)

Sharkey R, Rowley D, **Malinowski T**. A bench study evaluating gas temperature and absolute humidity during pediatric airway pressure release ventilation. *Respir Care* 2018, 63(Suppl 10) 3010626.

Rowley DD, **Malinowski TP**, Di Peppe JL, Sharkey RM, Gochenour DM, Enfield KtM. A randomized controlled trial comparing the effectiveness of lung expansion therapy following upper abdominal surgery in adult human subjects. *Respir Care* October 2018, 63 (Suppl 10) 3011132.

Rowley D, **Malinowski T**, Charles A, Gochenour. Descriptive observational pilot study comparing regional distribution of ventilation during lung expansion therapy in adult human subjects (abstract) *Respir Care* 2017; OF-15

Awards

2020 AARC Management Section Practitioner of the Year
2001 American Association for Respiratory Care Fellow (FAARC) Award
2001 Loma Linda University, School of Allied Health Professions, Alumni of the Year
2001 California Society for Respiratory Care, Lifetime Achievement Award
1997 Honorary Life Membership, California Society for Respiratory Care

Interview

**Charles B. (Bud) Spearman, MEd, RRT, FAARC
Assistant Clinical Professor, Loma Linda University
School of Allied Health Professions,
Department of Cardiopulmonary Sciences
Respiratory Care Programs**

**By Jeff Ward, MEd, RRT, FAARC
Mayo Clinic Multidisciplinary Medical Simulation Center
Rochester, Minnesota**



**1. Tell us about your early days as a respiratory therapist.
What brought you into the profession?**

In 1968, at the suggestion of a friend, I applied for a job in the inhalation therapy department of Tucson General Hospital. That friend is Harold McAlpine, RRT, one of the first registered respiratory therapists in Arizona. I had no previous background in this type of work, so I was trained on the job by Harry's own mentor Otis Brown. I was instructed in basic oxygen therapy for wall and portable gas cylinders, adult and peds oxygen tents, intermittent positive pressure breathing (IPPB) treatments with Bird and Bennett pressure ventilators, self-inflating resuscitators, ECGs, as well as some physical therapy procedures. The latter included simple traction and diathermy. I guess you could say that what brought me to the profession was the need of a job and what kept me in it was enjoying the responsibilities of taking care of patients.

2. Who were your mentors?

How did they contribute to your career?

About 18 months later, I entered the first formal respiratory therapy program in Tucson located at Tucson Medical Center (TMC). I changed jobs and began working evening shift in TMC's respiratory therapy department. That's where I met my second important mentor Steven P. McPherson, RRT. I attended classes during the mornings on the TMC campus then walked to the RT department to work. This program soon was subsequently affiliate with a new community college, and I earned my associate of science in respiratory therapy from Pima Community College.

I gained experience quickly since I was working and attending the program at the same time. I learned a lot from Steve McPherson and found that I liked the way he explained the technical aspects of the equipment we used actually worked. He could make devices make sense so that applying them to patients correctly could be better understood. He encouraged me to complete

the national Certified Inhalation Therapy Technician (CITT now the CRT) exam after my first year of school (1970) so that I could be credentialed. After graduation and passing the American Registry of Inhalation Therapy (ARIT, now the NBRC), I became RRT number 1646. Steve then asked me to help teach some of the courses. That was my introduction to education. Steve's confidence in me and his availability to me as an encouraging leader gave me confidence in myself. Steve was on the editorial board for the journal *Respiratory Care* and encouraged me and others to get involved in professional journalism. I then coauthored a Letter to the Editor with TMC therapist, Ray McCrea, RRT. I then contributed a couple of Teacher Features and two brief articles on technical aspects of respiratory care equipment. *The game was afoot.*

My writing took a quantum leap when Steve asked me to write in the one of the first comprehensive books specifically devoted to equipment. I contributed to five editions of *Respiratory Therapy Equipment*. That experience led to an opportunity to work on several editions of what became *Egan's Fundamentals of Respiratory Care*.

In the 1970s, I was fortunate to meet Glen Gee, RRT, Richard L Sheldon, MD, FAARC, Ray Masferrer, RRT, FAARC and each contributed to my professional development through their support and encouragement. I worked in the Loma Linda University/Loma Linda University Medical Center system from the mid-1970s until I retired in 2014. During those years I had the privilege of working with colleagues Howard G Sanders, MA, RRT and David Lopez, EdD, RRT who were examples for me as well as many others including many AS and BS students.

3. How did furthering your education contribute to your career path? What got you on your path as an educator?

In the early 1970s I enjoyed teaching in the program in Tucson but began to understand that my lack of former training as an educator was hindering me and that there were some respiratory therapy programs offering BS degrees. I also realized that if I were ever to leave my hometown Tucson and seek a teaching job in another program, I had better get at least a bachelor's degree. Respiratory therapy was really the only college teaching I enjoyed, so I looked for such programs. At that time there were very few RT programs offering a BS degree, and only one in the western US was Loma Linda University (LLU) in Loma Linda, California. Not only could I study respiratory therapy in greater depth and breadth, but the program also offered an area of emphasis in education. While enrolled in the BS program at the University, I worked in the respiratory care department of Loma Linda University Medical Center (LLUMC) under director Glen Gee, RRT. My classmates and co-workers at LLU included Rick Meyer, MS, RRT and Terry Krider, BS, RRT. We developed strong friendship while challenging each other during our various classes.

After graduating in 1975, I returned to Tucson and once again teach in our RT program there before returning to the LLU/LLUMC system in 1977. I was fortunate to be able to attend AARC annual conventions yearly starting around 1975 and that led to networking with other educators

and therapists. The privilege of attending those and other meetings also enhanced my growth through continuing education not only in therapy approaches, new devices and assessment techniques but also in research and education methods. I feel those experiences meant more to my professional growth after I completed my bachelors' program than those before that degree was completed.

I guess what really got me started on my path as an educator was that first teaching responsibility given to me by Steve McPherson in Tucson. He took a chance on me and I couldn't let him down. At LLU/LLUMC I was also asked to present to physicians, nurses and other respiratory therapists as part of the continuing education section of the respiratory care department. I really enjoyed teaching both seasoned practitioners and beginning students. The BS RT students I taught were generally working therapists while the AS RT students were in their first professional program. I had the best of both worlds. Later, the AS RT program was closed in favor of a BS level program. The original BS RT program remained so I still had a blend of both novice students and experienced practitioners in my classes and labs.

When the dean of the LLU School of Allied Health Professions offered to provide tuition assistance to the faculty wanting advanced degrees I found a Master's degree program in health professions education at the University in Southern California (USC) in nearby Los Angeles (UCLA), that I could attend part time with afternoon and evening classes. That program helped me be a better educator and to change the way I approached my courses. It built on the education courses in my BS RT program and workshops I had attended and gave me a broader understanding of both education theory and techniques.

4. What are some key lessons you have learned as: clinician, educator, writer, and leader in the profession?

One of the important lessons I learned as a clinician was the importance of being part of a collaborative team with health care providers such as physicians, nurses and others. To do this well, respiratory therapists must not only be skilled and knowledgeable but also be able to communicate effectively. When I started in the late 1960s as an on the job trainee, we functioned primarily as technicians receiving orders and applying treatments as directed. Most of the communication with physicians was done through nurses and patient assessment was mostly based on safety rather than therapy success. Formalizing respiratory therapy education raised the level of the therapist's ability to provide safe and effective care which was based on more thorough patient assessment. My experience as a therapist at LLUMC showed me how that could be done. While working in the ICU of the respiratory unit, I was expected to participate with the physicians, medical students, residents and nurses during rounds each day. George Burton, MD and John Hodgkin, MD were key pulmonary physicians that I was fortunate to work with and learn from both in the ICU as well as in the classroom as a BS RT student. On rounds, they would ask the therapist to provide any suggestions and questions about the patient's care. They

expected the therapist to be able to explain the rationale for changes requested. This was a quite different work environment than being a technician.

I was introduced to research studies briefly in my AS in RT degree but much more in both the BS RT and MS education degrees including both research design and statistics courses. This helped me interpret the literature better as well as design some projects which evaluated equipment used for respiratory care. While at LLU, I was able to present my research poster format at the Respiratory Care Journal's Open Forums sessions. This provided a chance to interact with other researchers, most of whom were doing higher level clinical research than I was. These sessions at the AARC International Congresses were particularly important for both professional growth but also for networking with others.

I was fortunate to have attended nearly all the AARC national Congresses and several Summer Forums and various state annual meetings over a 40 plus year period. That was important to developing course curriculum, contributing to textbooks, presenting lectures and workshops at national, international and state meetings. Some of the meetings required speakers to provide an article based on the presentation given. It was my privilege to have several articles published in the journal Respiratory Care.

I believe that taking advantage of opportunities relatively early in my career led to even more possibilities. Contributing to the Respiratory Care journal in the 1970s led to be asked to present a workshop with another therapist, Bob Demers, BS, RRT at the AARC Congress in 1977. Contributing to one textbook development and writing chapters for others led to an opportunity to work as an editor and contributor to another text. Again, these activities helped me in my primary role as an educator in my "day job".

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

Here are some recommendations I have for new graduates:

The first thing I recommend to new graduates after acquiring your RRT credential is to find a job that will give you a broad, sort of generalist patient care experience if possible. I believe that most new graduates are not quite ready for specialty areas and will benefit from a range of experiences with adults in general care and also rotations through ICUs. After honing your skills in patient assessment, therapy application, airway care, mechanical ventilation etc. you then might consider being assigned to specialty areas such as adult, pediatric and neonatal critical care, home care, rehabilitation, and sleep labs etc. Assisting in departmental business aspects or staff education are also considerations.

You should seek out any of the specialty credentials that you feel will help in your work and professional development. Memberships in the AARC, your state societies and CoBGRTE are highly recommended as is volunteering for these organizations when possible. You should

continue reading and researching information best care methods, seek out the best continuing education information for your credentials and your practice areas. You should seek out and be available to mentors whenever possible whether they are at the workplace, professional meetings or elsewhere.

Consider what the next level of formal education might do for you. Graduates with an AS degree should look for a bachelor's program as soon as possible and BS RTs should investigate graduate degrees that might apply to your professional development plan.

Take advantage of chances to contribute to your profession whenever possible. You never know where it might lead. Here is an example.

In the early 1980's then president of the AARC Glen Gee, RRT asked if I would consider an appointment to the NBRC and I accepted. There I was able to help create and modify credentialing exams along with leaders in the profession such as Fred Helmholtz, MD, Robert Kacmarek, PhD, RRT, FAARC and many others that also served as mentors to me in their own way. Work for the NBRC at that time also included helping states that wanted to use an NBRC's exam for state licensing.

As I worked teaching at LLU in BS RT programs I had an interest in promoting the development of other bachelor's level and graduate degrees in respiratory care. So, when Tom Barnes, EdD, RRT, FAARC was looking for people of like mind to join a professional association called CoBGRTE I signed on. Currently I am finishing my last year on the Board of Directors of CoBGRTE. It has been my honor to serve with the leaders of respiratory care education and management on this board.

In the early 2000's, I had the opportunity to accept an appointment to the Respiratory Care Board of California (RCB) which is the licensing board for respiratory care practitioners in the state. My past medical director, co-editor and friend Richard Sheldon, MD, FAARC was also on the RCB at the time and encouraged me to accept the appointment which I did. I served eight years on that board from 2006-2014 serving as president from 2013-2014. During my time on the RCB we were successful in changing the minimum entry credential needed for a license from the CRT to the RRT. I was fortunate to represent the RCB and LLU at each of the 2015 and Beyond workshops presented by the AARC in 2008, 2009 and 2010.

So, to new graduates as you settle into the respiratory care profession, think of how you can serve your patients by expanding your knowledge, experiences, credentials, education and membership in professional organizations. Volunteer and take advantage of opportunities that come your way. Invest in yourself and your profession and you will reap benefits for yourself and your patients.



CoBGRTE 2020 Officer Election Results

The Elections Committee is delighted to announce the election of three officers (two-year terms 2021-2022) for the Board of Directors of the Coalition for Baccalaureate and Graduate Respiratory Therapy Education.

Medical Advisor



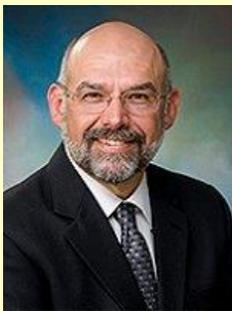
Russ Acevedo, MD, FAARC, FCCP

Dr. Acevedo is presently the medical director of the respiratory care department and the intensive care unit at Crouse Hospital in Syracuse, NY. The respiratory care department has been recognized by AARC as a “High Performance Team” for its work on Lung Partners.

Dr. Acevedo is currently serving on and has been Chair of the Board of Medical Advisors of the American Association for Respiratory Care. For the American College of Chest Physicians, he presently serves on the Respiratory Care Steering Committee. He is the Medical Advisor for the Coalition for Baccalaureate and Graduate Respiratory Therapy Education.

He is a Clinical Professor of Medicine and Adjunct Professor of Respiratory Care at the Upstate Medical University. Dr. Acevedo is the medical director for the New York State Society for Respiratory Care.

Secretary



José D. Rojas, Ph.D., RRT

Dr. Rojas is an associate professor and chair department of respiratory care the University of Texas Medical Branch at Galveston, School of Health Professions in Galveston, Texas. He received his Certificate of Completion in Respiratory Care at Victoria College in Victoria, Texas, and his associate of applied science degree in respiratory care at Del Mar College in Corpus Christi, Texas. In 1995, Dr. Rojas completed a bachelor of applied studies in biology at Abilene Christian University in Abilene, Texas and in 2000, he completed his PhD in physiology at Texas Tech University Health Science Center in Lubbock, Texas. His research interests include human patient simulation for critical care team training, pulmonary function and population health of Caribbean populations, translational lung biology and physiology. Dr. Rojas

has been an active member of CoBGRTE and served on the Board of Directors and as an Officer previously. He serves on several CoBGRTE committees and feels a strong dedication toward advancing the profession through education at the baccalaureate and graduate levels. Having served as Secretary for one term previously, CoBGRTE is pleased to have him serve as Secretary for another term.

Treasurer



Jonathan Waugh, PhD, RRT, RPFT, FAARC

Jonathan Waugh is professor and laboratory director in the respiratory therapy BSRT program at Liberty University in Lynchburg, Virginia. Dr. Waugh received his undergraduate bachelor of science degree in respiratory therapy from the University of Central Florida and his MS and PhD degrees from the Ohio State University. He is a registered respiratory therapist and registered pulmonary function technologist. Dr. Waugh is a member of the Tobacco Free roundtable of the American Association for Respiratory Care and an allied health member of the American College of Chest Physicians.

Following serving at Samford University from 2015 to 2019 as chairman for the department of cardiopulmonary sciences, he has recently accepted a full-time faculty position at Liberty University where he is also assisting in new program development. In his prior role as director of a Center for Teaching & Learning (University of Alabama at Birmingham), he mentored faculty to improve teaching and support educational innovation at the university. He is currently as a research investigator for an AARC research grant on “Critical Thinking and Clinical Judgement Skills in Recent Graduates of Associate Degree and Baccalaureate Degree Program.”

Coming Soon!

**By Daneen Nastars, DHSc, RRT, RRT-ACCS
Chair of CoBGRTE Membership Committee**

We have some exciting news! CoBGRTE has a new membership software, Join IT, which will make it easier for our members to join, renew, and manage their memberships. The features include:

- User-friendly interface
- Automatic renewal option with email notification before renewal
- Membership renewal notifications
- Digital membership card that can be downloaded to Apple wallet app and Passes app for android users

- Members can update their information anytime
- Join IT can be used to register for CoBGRTE events
- Members can upload a picture to their membership profile
- Access to print receipts for payments
- Group payments and sign up
- Referral discount can be applied to payments

What is next?

Please look for an email soon from CoBGRTE explaining what, if anything, you will need to do to update your membership.

The membership committee is excited to take this next step towards helping CoBGRTE increase memberships and making renewal easier for our current members.



2020 Scholarship Information ***(Application Deadline October 16 2020)***

The Coalition for Baccalaureate and Graduate Respiratory Therapy Education (CoBGRTE) was formed to help students, faculty, and the public learn about baccalaureate and graduate respiratory therapy education in the United States of America. To that end, the CoBGRTE Board of Directors voted to make scholarship money available to help support school expenses or travel to the AARC Open Forum to present research abstracts for students enrolled in BSRT or MSRT programs.

Given the COVID-19 Pandemic, the Board of Directors voted to increase the amount of merit scholarship support. We have increased the dollar amount for these scholarships to \$1000 and we will continue to offer 8 of these annually. In addition, we increase to \$2000 the research scholarship and refer to it as the Dr. Craig Smallwood Memorial Research Scholarship. Dr. Smallwood was an avid supporter of CoBGRTE, the AARC, the respiratory profession and research. His untimely passing has left a tremendous void for his friends, family, and the profession. Although increasing the scholarship support for research cannot fill the void created by his passing, our hope is that the support provided in his name will motivate bright and inquisitive minds in our profession to continue the work that he found to be so important. It is that motivation that drove us to rename the research scholarship in his honor and increase the scholarship award to \$2000. This year will mark the inauguration of the Dr. Craig Smallwood

Research Scholarship. We hope that the recipient of this award will continue Dr. Smallwood's inquisitive nature and continue to propel the profession forward.

The current pandemic has begun to make the public aware of the profession of respiratory care and we hope that these scholarship awards will support bright, innovative, and dedicated individuals as they embark on their professional journey. The application period for these scholarships opens on June 1, 2020 and closes on October 16, 2020.

Scholarships Available: Two types of scholarships are available.

Merit Scholarships: Scholarship awards will be based on Academic Achievement, Service, Research Activities, and Awards and Honors. The committee expects to award eight \$1000 merit scholarships to BSRT and MSRT students in 2020.

Research Scholarship: In addition to the above merit scholarship criteria, the research scholarship will also be based on the quality of an approved research proposal and budget designed to study any aspect of respiratory care. The committee expects to award one \$2000 research scholarship to a BSRT or MSRT student in 2020.

Eligibility criteria: The successful candidate will be a BSRT or MSRT student enrolled and in good academic standing at a regionally accredited university. Applicants must also be members of CoBGRTE. Scholarship awards are open to graduate students and full-time undergraduate students having completed one year of respiratory therapy major coursework.

Submission guidelines: Application materials are due to the Chair of the Scholarship committee by October 16, 2020. Only complete applications will be considered. Submit to Committee Chair: Dr. José D Rojas, 301 University Blvd., Galveston, Texas 77554, jdrojas@utmb.edu.

Notification of awards is expected to be made by November 20, 2020

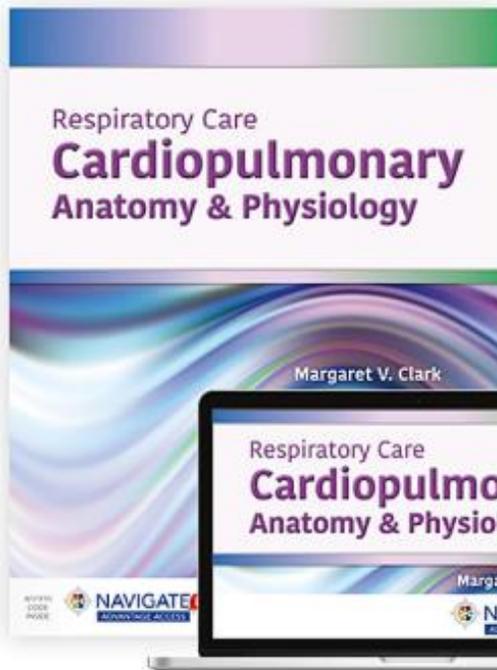
Applicants for merit scholarships are required to submit the following:

1. Official transcript verifying GPA and current enrollment in a RT program
2. Current professional resume
3. One-page typed essay that addresses the question of how CoBGRTE can accomplish its goal to increase the number of graduates from baccalaureate and graduate respiratory care educational programs.

Applicants for research scholarships are required to submit the following:

1. Research proposal and budget
2. The research scholarship proposal should include an introduction with literature review, methods and literature citations.
3. A letter from faculty adviser supporting the feasibility of the research proposal.
4. Current professional resume

Respiratory Care Cardiopulmonary Anatomy & Physiology



This NEW comprehensive, highly illustrated text has a strong emphasis on cardiovascular and pulmonary physiology, acid/base balance, and blood gas interpretation. This text will expertly guide students throughout schooling and professional life. With brand new content covering genetics, the inflammatory cycle, and pulmonary remodeling this text provides students with the most current information on cardiopulmonary anatomy and physiology. This text was also written with the understanding to prepare students for the National Board for Respiratory Care Examination Matrix.

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Boise State University
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Rush University
Salisbury University
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CoBGRTE Institutional Members – Continued

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Southern Connecticut State University
Northern Kentucky University
Boston Children's Hospital
Canisius College
Carlow University
Jacksonville State University
Modesto College
Newberry College
Eastern Tennessee State University
University of Cincinnati
University of Michigan – Flint
Liberty University
Ozarks Technical College
North Carolina Respiratory Care Board
Vidant Medical Center
Norton Healthcare
Duke University Hospital
Ohlone College
Ferris State University
University of Pennsylvania Health System
Loma Linda University
Spokane Community College
California Society for Respiratory Care



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 70 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 75 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.

Become a CoBGRTE member by completing the application on the Membership Page: <http://www.cobgrte.org/membership.html>

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