

# **The Coalition Chronicle**

**Coalition for Baccalaureate and Graduate Respiratory Therapy Education**

**April 29, 2019 Volume 8 (4)**

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## **Texas State University – Round Rock Campus** *Spotlight Article*



### ***Department of Respiratory Care – Willow Hall***

**BSRC-Entry, BSRC-Online Completion, and  
MSRC Post-Professional Online Programs**

**By Gregg Marshall, PhD, RRT, RPSGT, RST, Chair & Professor**

**T**exas State University (Texas State) proudly offers three respiratory therapy programs. The traditional Bachelor of Science in Respiratory Care (BSRC) entry-level program as our campus-based program, the online Bachelor of Science in Respiratory Care (BSRC-O) degree advancement program designed for individuals in-state/out-of-state holding an associate's degree in Respiratory Care with the RRT credential, and our online Master of Science in Respiratory

Care (MSRC). The post-professional program is designed for RRTs holding a bachelor's degree wishing to advance their personal career through graduate studies.

With the main campus of Texas State located in San Marcos just 30 miles south of Austin and 50 miles north of San Antonio on the I-35 corridor, the university has a total enrollment of almost 40,000 students. Although the San Marcos campus for Texas State was established in 1899, a north campus was developed in Round Rock 15 years ago, located just 50 miles north of San Marcos. The university's mission at Round Rock is to offer a variety of undergraduate and graduate degrees to the working young adult learner with the recent relocation of the College of Health Professions to the north campus. With eight departments/schools within the college, four departments have already moved on to the Round Rock campus into new, state-of-the-art buildings. Future plans include completion of a third building for the remaining four departments/schools.

As of May 2018, the Round Rock campus became the new home to the Department of Respiratory Care, joining the School of Nursing that began on the Round Rock campus 5 years ago, Willow Hall is the campus "clinic hall" and houses three College of Health Professions departments; the Department of Physical Therapy offering the Doctorate in Physical Therapy, the Department of Communication Disorders offering an undergraduate and graduate degree in Speech-Language Pathology, and the Department of Respiratory Care. The mission of Willow Hall is to provide active clinic practice areas for each of the departments thus bringing patients directly to the beautiful facility to provide care through an active PT clinic, a speech-hearing-language clinic, and the Texas State Sleep Center.



The Pulmonary Diagnostics Class/Lab also provides PFT testing for all Texas State employees requiring regular PFT lung screening such as facilities workers, faculty/graduate students in engineering (nano inhalation), art/sculpturing/ceramics (inhalation of silica and grinding particulates), and any department where inhalation of particles is inherently part of the discipline. Our RPFT faculty member, Kevin Collins, completes the baseline or total PFT as needed and our pulmonologist provides the interpretation/recommendation at a very reduced cost to the department in need. Providing PFT testing for the university has proven to be an excellent way to spread information about the “world of respiratory care” across campus in a very practical way. Funds collected from the studies are used to pay the pulmonary physician for the interpretation and allow the department to deposit revenues in an income generating account.



As a snapshot of respiratory care programs offered: the BSRC Entry-level degree program is a 120-credit hour degree program offered in a “2+2” format. It requires all pre-requisites to be completed prior to acceptance into the BSRC program which takes 19 months to complete.

The BSRC-O degree advancement program is also 120-credit hour degree program but is offered totally online at the student’s own pace either full-time or part-time. For graduates of associate degree entry-level programs with the RRT credential, block credit of 35 semester hours

of respiratory care coursework is applied toward the 120-semester credit hour degree. Completed core coursework is also applied toward the 120 hours and any remaining core courses required for a bachelor's degree can also be completed online with Texas State such as additional history or literature courses. The convenience of online delivery allows students to remain in their hometown and employed, either in-state or out-of-state, while completing the program. With all pre-requisites in place, the BSRC-O degree program can be completed in one year.

The MSRC is offered online for the working therapist to provide maximum flexibility to complete graduate studies in either the Leadership concentration/track or the Polysomnography concentration/track. An additional option has been established within the Leadership concentration to add a graduate minor in Polysomnography, if desired. Total enrollment for all three programs combined is 138 students. Since its inception in 1972, the Entry-Level program has graduated 47 cohorts. The BSRC Entry-Level program accepts a cohort of 40-44 students each fall with fulltime enrollment required in order to graduate on-time. The BSRC-O program admits students each fall/spring/summer and the unique curriculum design allows students to start the program at any time of the year as a full-time or part-time student. The MSRC program also admits students each fall/spring/summer and allows students to begin graduate studies as a full-time or part-time format based upon individual needs. The curriculum and admission process for each of the three programs can be viewed on the department website at <http://www.health.txstate.edu/RC>.



The Class of 2019 getting ready to graduate on May 18 and then “jump in the river” – a time-honored tradition for Texas State Graduates as they jump in with full regalia!

Willow Hall is a \$67.5 million facility providing 107,708 square feet of learning space featuring class/labs for each of the three academic departments. For Respiratory Care, the expanse to over 10,400 square feet provides for amazing learning opportunities with three class/labs that will seat 48 students each. The Basic Instrumentation Lab serves juniors during their first year in the program with instrumentation lab focusing on basic modalities commonly found in medical/surgical floor therapy settings with additional prep for critical care. A Specialty Procedures Lab serves as a learning space for pulmonary function testing and advanced diagnostics. The Advanced Instrumentation Lab services seniors with critical equipment including 15 ventilators that represent a model from the fleet of ventilators found at each of our 8 local clinical affiliates. The opportunity for hands-on learning and bench-top research has been exciting for students and faculty.





Within the Department of Respiratory Care, Willow Hall also provides faculty with two dedicated research areas in both Respiratory Care and Sleep research. The two research areas total over 1,300 square feet and provide faculty with areas for benchtop research and a quiet space for research. Faculty and graduate assistants are free to set up research spaces as needed.

One course the junior BSRC Entry-Level Program students are required to take is Cardiopulmonary Anatomy & Physiology, taught by Dr. Peter Petroff. With over 45 years of experience as a pulmonary MD, Dr. Petroff has a passion for education and preparing RT students to be among the best and brightest RTs upon graduation. The lab portion of this course includes a Gross Anatomy course with cadavers in our new state-of-the-art Gross Lab. With cameras in each adjustable spotlight and monitoring screens, students can practice shared learning with one another while the gross anatomy RC faculty can identify structures and share them on-screen, as well. Texas State is one of only two BSRC programs in the country that

requires students to rotate through Gross Anatomy and the program has been in place for over 35 years. One thing is for sure, students never look at a CXR in quite the same way again!



The Texas State Sleep Center that was previously a 2-bedroom clinic in the San Marcos area was closed and relocated to Willow Hall on the Round Rock campus. Our new Sleep Center has been expanded to 4-bedrooms with 4 full bathrooms, 2 prep-rooms for applying monitors to sleep patients, a spacious control room for the sleep techs, and large sleep research area for faculty. Willow Hall has increased the size of our Sleep Center from the 1,000 square feet on the San Marcos campus to over 3,300 square feet. The Sleep Center is fully accredited by The Joint Commission and received the full 3-year accreditation in the Fall of 2018. Our Medical Director, Dr. Said Soubra, MD, is board-certified in pulmonary, critical care, and sleep.

The mission of the Sleep Center is first, education, second, research, and lastly to provide premier sleep diagnostics and treatment to the surrounding community. Students in the BSRC campus-based program rotate through the sleep center through clinical rotations and MSRC graduate students choosing either the Polysomnography Track or a graduate minor in Polysomnography, which includes clinical hours in the Sleep Center. We are fortunate to have two credentialed, experienced, patient-focused sleep technologists staffing the Sleep Center. The future research opportunities through the Sleep Center are very exciting with development of a multidisciplinary community collaboration of healthcare professionals already in progress.



Revenues produced from the Sleep Center are deposited into an income-generating account that may be used for multiple purposes. These funds have been used to update/repair equipment in the Sleep Center, provide startup funds for small research projects for the faculty, send faculty to professional conferences, purchase large ticket items such as mechanical ventilators and other capital equipment, and support professional development for the

faculty. Over the past 15 years of operation of the Sleep Center, faculty and students have benefited tremendously from this resource in many ways.

The Texas State administrative support of the Respiratory Care Department has been consistently strong and encouraging. As program proposals have been developed and submitted in line with the university, college, and departmental strategic plan, administration has provided both approval and requested financial support. As a result, an outstanding faculty has been assembled to deliver the curriculum and graduate therapists ready to step forward into leadership roles and influence the future of our profession. At this writing, we are filling our 10<sup>th</sup> faculty position with 9 of the 10 positions being tenured/tenure-track and one position being a clinical professor track. Currently, five of the current faculty have doctorates, two faculty have doctorates in process, and two more are planning to pursue their doctorates soon. The years of teaching/research/service experience speaks of the faculty's dedication to the Respiratory Care profession and passion to see the discipline advance and mature. The cumulative RC education experience for our faculty totals 115 years.





## **Bachelor of Science in Respiratory Care (BSRC)**

Applicants are required to complete all pre-requisites and general education courses prior to application to the BSRC program.

### **JUNIOR YEAR**

#### **FALL**

RC 3313 RC Clinical Practice I  
RC 3315 Cardiopulmonary-Renal A&P  
RC 3212 Pharmacology  
RC 3314 RC Instrumentation  
RC 3316 Fundamentals in RC

14 hours

#### **SPRING**

RC 3321 Cardiopulmonary Disease I  
RC 3323 RC Clinical Practice II  
RC 3322 Critical Care Concepts  
RC 3324 Critical Care Instrumentation  
RC 3125 Pulmonary Function Testing

13 hours

#### **SUMMER I & II**

RC 3333 RC Clinical Practice III  
RC 3232 Hemodynamic Diagnostics  
RC 3334 Neonatal Respiratory Care

8 hours

### **SENIOR YEAR**

#### **FALL**

RC 4211 Respiratory Care Research  
RC 4212 Critical Care Clinical Simulation  
RC 4314 Advanced Ventilator Concepts  
RC 4316 RC Clinical Practice IV  
RC 4317 Pulmonary Rehabilitation

13 hours

#### **SPRING**

RC 4223 ICU Internship  
RC 4321 Leadership, Management, Educ  
RC 4322 Respiratory Care Seminar  
RC 4225 Specialization Internship  
RC 4224 Research Seminar

12 hours

**General Education Core + 22 BSRC Pre-reqs - 60 hours**

**BSRC Curriculum -- 60 hours**

**TOTAL BSRC Degree -- 120 hours**

## **Master of Science in Respiratory Care**

### **CORE RESPIRATORY CARE COURSES**

RC 5301 Advanced Cardiopulmonary Physiology

RC 5302 Clinical Practice Guidelines & Respiratory Care Protocols

RC 5303 Respiratory Care Research Methods & Designs

RC 5304 Cardiopulmonary Disease Patient Education

RC 5305 Respiratory Care Applied Research

RC 5306 Academic Leadership in Respiratory Care

RC 5307 Advanced RC Seminar

RC 5308 Advanced Cardiopulmonary Diagnostics & Therapeutics

### **POLYSOMNOGRAPHY TRACK COURSES**

RC 5310 Fundamentals of Polysomnography

RC 5313 Polysomnography Therapeutic Intervention

RC 5211 Polysomnography Instrumentation

RC 5214 Sleep Staging & Diagnostics

RC 5215 Clinical Polysomnography-Sleep Staging

### **LEADERSHIP TRACK COURSES**

HA 5304 Healthcare Economics and Financial Theory

HS 5315 Healthcare Finance for Clinical Leaders

HA 5321 Healthcare Law

HA 5362 Healthcare Organizational Behavior/Theory

**Our current 9 fulltime faculty and positions held include:**

Dr. Chris Russian, PhD, RRT, RRT-NPS, RPSGT, RST, Professor/Program Director of MSRC

Dr. Josh Gonzales, DHSc, RRT, RRT-SDS, RRT-NPS, Assoc Professor/Program Director of BSRC-Online

Dr. Arzu Ari, PhD, RRT, FAARC, Professor

Dr. De De Gardner, DrPH, RRT, RRT-NPS, FAARC, FCCP, Associate Professor

Mr. Kevin Collins, MS, RRT, RPFT, AE-C, ABD, Associate Professor

Mr. Nick Henry, MS, RRT, RRT-ACCS, RRT-NPS, AE-C, Associate Professor and Director of Clinical Education

Mr. Nathan Rodrigues, MSIS, RRT, RRT-NPS, RRT-SDS, EMT-B, Assistant Professor

Ms. Sharon Armstead, EMBA, RRT, Clinical Assistant Professor

Dr. Gregg Marshall, PhD, RRT, RPSGT, RST, Department Chair/Professor/Program Director for BSRC Entry-Level Program and Director of Texas State Sleep Center



From L to R bottom step: Kevin Collins, Nate Rodrigues, Josh Gonzales, Nick Henry, Arzu Ari,  
From L to R top step: Sharon Armstead, Chris Russian, De De Gardner, and Gregg Marshall.

At our recent spring Advisory Board Committee meeting, the Advisory Board, faculty, and administration voted to submit a Letter of Intent for voluntary accreditation of our BSRC-Online and the MSRC-Online Degree Advancement Programs. The Texas State University program faculty and administration acknowledge the value of accreditation through CoARC in providing Standards and Guidelines important to the integrity of respiratory care education. As the profession moves forward toward bachelor's entry-level and degree advancement at the graduate level, we support and encourage voluntary accreditation in meeting the profession goals of the respiratory care profession as led by the AARC, CoARC, NBRC and CoBGRTE.



## **Contact Information**

**Dr. Gregg Marshall**

**Chair/Professor**

**Texas State University - Round Rock Campus**

**200 Bobcat Way Willow Hall 214**

**Round Rock, TX 78665**

**512.716.2682 office**

**sm10@txstate**

**[www.health.txstate.edu/RC](http://www.health.txstate.edu/RC)**

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