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advancing quality anesthesia care,
serving our members,
promoting the nurse anesthesia profession

2017 WINTER NEWS BULLETIN



PRESIDENT'S ADDRESS

The college football regular season has ended and bowls are set. In the last few weeks we have witnessed that if the entire team doesn't function on all cylinders, you will be defeated. The ALANA is like a college football team. We have a new board/team that has begun work for you, however, we can only function at our peak if every CRNA in Alabama joins in to help. Why just sit on the sideline? We need you in the game. I think every CRNA in Alabama has something to contribute to the overall effectiveness of the team. Can you recruit a friend to become a member? Do you know someone running for public office that you can assist? Do you contribute to the PAC? Do you have an interest in serving on a committee? You can see that there are numerous ways YOU can be a part of the team.

I rely on past leaders of our association for guidance and expertise. I want to thank our Past President, Brent Ledford, for his leadership and friendship over the past couple of years. He was very effective in continuing the momentum of the ALANA. Awesome ideas were implemented and will set the course for your new board. There are far too many names to share here that are influential members of my life. All I can say is that I am blessed. In September, the membership of the ALANA elected new members to serve on the Board of Directors. This is not my first rodeo, yet again I have the honor of serving alongside a diverse, intellectual, forward thinking group of individuals that are willing to give of their time in order to make ALANA a recognized association representing Alabama CRNAs.

If you attended the ALANA Annual Fall Meeting, you noticed we were in an interesting venue, Regions Field. The weekend was full of great speakers. The Welcoming Committee also hosted the annual welcoming reception for new SRNAs from our two programs. The board is here to serve the membership and we are interested in your input. Look for text to vote messages at the beginning of the year regarding the potential venues for our fall meeting 2018.

The last weekend in October the board met for a weekend of strategic planning for the upcoming year. We mixed in a little fun/team building by going to the Autobahn Indoor Speedway. Here I was able to see the competitive spirit that's alive in CRNAs. WOW! We also worked in groups for a pit crew challenge. Perhaps the most challenging piece of the experience was a blindfold challenge. Yes, the driver was wearing a blindfold while a teammate directed the driver through the course. After getting to know each other a little better, we set some very achievable, forward thinking goals for the ALANA. Contracts were reviewed and I am pleased that the board voted to continue to utilize the services of Group Management Services, Franklin Resources Group, and Joe Knight as General Counsel. A balanced budget was established.

Just a week later, several members of your board attended the AANA Fall Leadership Academy in Rosemont, Illinois. The AANA provides different tracks that are geared toward equipping state leaders with tools to meet the challenges you may face as an association. We had the opportunity to visit the AANA Headquarters in Park Ridge. If you want to see the history of nurse anesthesia, this is a must see for you.

What's next? Your board has monthly conference calls to keep us on track and numerous other events coming up that we want you to be a part of. If you want to serve on a committee, contact me now, mwhumber@gmail.com.

Upcoming events:

CRNA Week January 21-27, 2018

CRNA Legislative Day in Montgomery January 24, 2018

Nurses Day at the Capitol in Montgomery TBA

ALANA Annual Spring Meeting in Sandestin April 13-15, 2018

AANA Mid Year Assembly in Washington D.C. April 21-25, 2018

AANA Annual Congress in Boston September 21-25, 2018

ALANA Annual Fall Meeting in Birmingham October 5-7, 2018



ALANA President
Michael W. Humber, DNP, MNA, CRNA



Posing on the Awards Stand are Michael Humber, Kerry Varner & Morgan Reaves.



The ALANA Board poses after Retreat meeting

We are seeking nominations for the ALANA Board of Directors for the 2018 ballot. If you are interested in serving, or know someone that may be interested, please email ALANA@gmsal.com or reach out to Morgan Reaves at morganreaves@me.com

I know you've heard about our AWESOME Early Bird Special for the ALANA Annual Spring Meeting in Sandestin. If you register before February 15, 2018 you will pay only \$350 as an AANA member. We have a remarkable lineup of renowned national speakers attending this meeting including an expert healthcare fraud attorney that will discuss the Company Model which affects many CRNAs. Register now at www.alabamacrna.org

Dr. Heather Rankin, current AANA Region 7 Director, has been nominated by the ALANA for the position of AANA Treasurer for the upcoming AANA Ballot. Please reach out to Heather and lend support as she campaigns over the coming months.

Are you receiving texts and emails from the ALANA through One Call Now? If not, please make sure your information is up to date with AANA or contact ALANA@gmsal.com

In closing, I thank God for giving me the opportunity to serve patients as a CRNA. I am blessed with a great and trusted profession where I can help comfort people when dealing with potentially life altering circumstances. I am passionate about my profession. Thank you for allowing me to serve as your President. The Alabama Association of Nurse Anesthetists is stronger than ever and we are positioned to protect and serve CRNAs in Alabama. I encourage you to read your texts and emails, respond when needed, and reach out to your board of directors with your needs. I look forward to serving you over the course of 2018.

Have a Blessed Holiday Season and Happy New Year!

Michael

BOARD OF DIRECTORS

Michael W. Humber, DNP, MNA, CRNA
President
UAB Hospital
526 Reach Drive
Birmingham, AL 35242
205.999.7544 (cell)
mwhumber@gmail.com

Ray Dunn, MNA, CRNA
President-Elect
DCH Health System
14810 Highway 171
Northport, AL 35475
205.826.0063 (cell)
rraydunn@yahoo.com

Willie Furr, DNP, MSN, CRNA
Secretary/ Vice President
Andalusia Health
1614 Lindsey Bridge Road
Andalusia, Alabama 36420
334.222.4775 (home)
334.488.6109 (cell)
williefurr@andycable.com

Bryan A. Wilbanks, PhD, DNP, CRNA
Treasurer
UAB School of Nursing
1112 Ford Chapel Road
Harvest, AL 35749
256.503.4360 (cell)
BwilbanksCRNA@gmail.com

Wesley B. Canerday, MSNA, CRNA
Senior Director
Huntsville Hospital
43 Holly Park Blvd SW
Huntsville, AL 35824
256.265.0188 (work)
256.714.8867 (cell)
wcanerday@me.com

Justin T. Carroll, MSN, CRNA
Senior Director
Children's of Alabama
3918 11th Avenue South
Birmingham, Alabama 35222
205.542.4587 (cell)
carro015@gmail.com

Salima Mulji, MNA, CRNA
Senior Director
UAB Hospital
1503 Scout Ridge Drive
Hoover AL 35244
205.835.5234 (cell)
205.987.9007 (home)
smulji684@gmail.com

Kerry L. Varner, MSNA, CRNA
Senior Director
Dothan Anesthesiology Associates
403 Bent Oak Drive
Dothan, AL 36303
850.890.6907 (cell)
kerryvarner76@gmail.com

Trey S. Burg, MNA, CRNA
Director
202 Pebble Creek Ln
Enterprise, AL 36330
334.308.1012 (home)
334.494.2178 (cell)
tburg20907@roadrunner.com

Krista Niedermeier, DNP, MNA, CRNA
Director
Children's of Alabama
720 Sussex Drive
Vestavia, AL 35226
205.563.0602 (cell)
Kristan7@gmail.com

Philip B. Fikes, MNA, CRNA
Director
Capstone Anesthesia Services
14131 Hwy 82 East
Duncanville, AL 35456
205.750.3604 (home)
205.886.7397 (cell)
ib4ua13@yahoo.com

Morgan Reaves, MSN, CRNA
Nominating Committee Chair
Grandview
4928 6th Avenue South
Birmingham, AL 35222
205.522.9051 (cell)
MorganReaves@me.com

Leslie Hackbardt, SRNA
UAB Student Representative
3040 Riverwood Terrace
Birmingham, AL 35242
312.443.2539 (cell)
lgstahlhut@gmail.com

Ben Odom, RN, BSN, SRNA
Samford Student Representative
2537 Ridgemont Dr.
Birmingham, AL 35244
205.441.2996 (cell)
Odomben1@gmail.com

Brad A. Hooks, MSNA, CRNA
Reimbursement Chair
Health Star Clinic
9411 Dunleith
Montgomery, AL 36117
334.414.3435 (cell)
334.356.9970 (office)
334.269.8783 (fax)
Brad_Hooks@yahoo.com

Amy P. Neimkin, DNP, MBA, CRNA
Federal Political Director
UAB Hospital
368 Woodward Ct.
Birmingham, AL 35242
205.991.9405 (home)
205.243.8382 (cell)
aneimkin@aol.com

David Gay, MSN, MNA, CRNA
Federal Political Director
Providence Hospital
21050 Odom Road
Citronelle, AL 36522
251.895.2880 (cell)
DavidBrianGay@aol.com

Susan Hansen
Government Relations Specialist
4120 Wall Street
Montgomery, AL 36106
334.244.2187 (office)
334.320.7539 (cell)
hansen@franklinrg.com

Joe Knight, JD, CRNA
ALANA General Counsel
Kress Building, Suite 500
301 19th Street North
Birmingham, Alabama 35203
205.655.4501 (home)
205.458.1200 (office)
205.531.5157 (cell)
tjoeknight@aol.com

Larry Vinson, MPA, CAE
ALANA Executive Director
Post Office Box 240757
Montgomery, AL 36124
334.395.4663 (home)
334.260.7970 (office)
334.462.8035 (cell)
334.272.7128 (fax)
larry@gmsal.com

2018 SPRING MEETING APRIL 13-15 HILTON SANDESTIN 20 CLASS A CES

Registration is \$350 if you register before February 15th. If you register after February 15th, registration is \$500. Make your hotel reservations now before they sell out. March 13 is our cut off. Remember, the price goes up as we get closer to the date. Visit the Hilton Sandestin's website to reserve your room. Once you select your dates and room type, you can enter the CVV code of ANS to get the ALANA rates. Our rates start at \$239.



THURSDAY, APRIL 12

- 1700-2000: **Early Registration & Exhibitor Set Up** - Coral Ballroom Registration Desk (Tables First Come, First Served)
- 1800-2000: **ALANA Board Meeting**

FRIDAY, APRIL 13 – 8 HOURS, 3 PHARM

- 0600-0700: **Registration/Continental Breakfast/Exhibits Open**
Coral Ballroom Registration Desk
- 0600-0700: **Wellness Presentation, Wearing Masks I**
- 0600-0700: **Yoga with Pennie Nichols, CRNA** (Meet at ALANA Registration Desk)
- *0700-0800: **Pharmacogenetics & Personalized Anesthesia Care**, LTC Peter Strube, DNAP(c), MSNA, APNP, ARNP, CRNA
- *0800-0900: **Opioids, Pain: Should We or Can We Go Without?** LTC Peter Strube, DNAP(c), MSNA, APNP, ARNP, CRNA
- 0900-0930: **Break/Exhibits Open**
- 0930-1030: **Dogma, Traditions & Myths of Anesthesia: What is True & What is the Evidence**, LTC Peter Strube, DNAP(c), MSNA, APNP, ARNP, CRNA
- 1030-1130: **Write Me Up, Please: Safety First. A New Era is Here**, LTC Peter Strube, DNAP(c), MSNA, APNP, ARNP, CRNA
- 1130-1300: **Lunch on Your Own**
- 1300-1400: **ABCs of Pediatric Anesthesia**, Heather Rankin, DNP, CRNA
- *1400-1500: **Antibiotic Review**, Heather Rankin, DNP, CRNA
- 1500-1530: **Break/Exhibits Open**
- 1530-1630: **Transfer of Care in Perioperative Settings: An AANA Foundation Study**, Bryan Wilbanks, DNP, PhD, CRNA
- 1630-1800: **Reception on the Deck**, Sponsored by the Samford & UAB Nurse Anesthesia Programs - Sunset Deck (Please Wear Nametag for Admittance)

SATURDAY, APRIL 14 – 6 HOURS 1 PHARM

- 0600: **Yoga with Pennie Nichols, CRNA** (Meet at ALANA Registration Desk)
- 0630: **Registration, Coffee & Exhibits Open**
- 0630-0730: **Wellness Presentation, Wearing Masks II, Ten Years Later**
- 0730-0830: **ALANA Update/Business Meeting with Hot Breakfast Buffet**, President Michael Humber, DNP, MNA, CRNA
- 0830-0930: **AANA Leadership Panel Presentation**, Garry Brydges, DNP, ACNP-BC, Executive MBA, CRNA, Heather Rankin, DNP, CRNA, Ralph Kohl, Mark Silberman, JD & Michael Humber, DNP, MNA, CRNA
- 0930-1000: **Refreshment Break & Exhibits Open**
- 1000-1100: **Healthcare Fraud: Basic Training for CRNA's**, Mark Silberman, JD
- 1100-1200: **Employment Issues & Contract Negotiating for the CRNA**, Mark Silberman, JD
- 1200-1315: **Lunch on Your Own**
- 1315-1415: **12 Lead ECG: Quick & Easy interpretation**, Garry Brydges, DNP, ACNP-BC, Executive MBA, CRNA
- *1415-1515: **Preventing PONV: Risk Stratification & Pharmacologic Agent**, Garry Brydges, DNP, ACNP-BC, Executive MBA, CRNA
- 1530-1700: **ALANA Beach Party** (Must Have Wristband to Attend)



SUNDAY, APRIL 15 – 6 HOURS, 2 PHARM

- 0600-0700: **Registration/Continental Breakfast**
- 0600-0630: **Yoga with Pennie Nichols, CRNA** (Meet at ALANA Registration Desk)
- 0600-0700: **Wellness Presentation III, Making Lemonade: One CRNA's Story of Addiction & Recovery**
- *700-0800: **Interactive Pediatric Pharmacology Update**, Lisa Herbing, DNP, CRNA, COI
- 0800-0900: **Minimizing the Risk of Post-extubation Laryngeal Edema in Children**, Lisa Herbing, DNP, CRNA, COI
- *0900-1000: **Neuraxial Anesthesia for Major Orthopedic Procedures**, Ken Taylor, DNP, MSN, CRNA
- 1000-1030: **Break & Hotel Checkout**
- 1030-1130: **Evidence Based Anesthetic Management of the Obese & Morbidly Obese Surgical Population**, Ken Taylor, DNP, MSN, CRNA
- 1130-1230: **CRNA Perception of Factors Affecting Patient Safety Culture**, Susan McMullan, PhD, MSN, CRNA
- 1230: **Adjournment**

2017 FALL MEETING HIGHLIGHTS SEPTEMBER 22-24 REGIONS FIELD BIRMINGHAM, ALABAMA



Justin Carroll, Lisa Herbinger, Amy Snow, Beth Ann Clayton, Terri Cahoon, & Kyle Vanderford chat between sessions



ALANA President Michael Humber presents Past President's pin to Brent Ledford



John Morris and Brent Ledford pose with ALANA Distinguished Service Award winner Janice Drake.



Dr. Humber addresses students at ALANA Reception



Attorney General Steve Marshall addresses Fall Meeting



ALANA leadership team meets with Attorney General Steve Marshall



at multiple sites, including Oxford Surgery Center, Northeast Alabama Regional Medical Center, and HealthSouth Medical Center. John has also served the ALANA for many years in several roles, including president for two terms, multiple years as government-relations and other elected positions.

Wanda Marquardt received the Living Legacy Award for “perpetuating Mrs. Moffett’s vision for leadership and service to others.” Wanda has touched many CRNA lives in a variety of ways. She has served the ALANA as president, served as an associate professor in UAB’s School of Health Related Professions, lead as Chief CRNA at Carraway Methodist Hospital for fifteen years, volunteered in Haiti for medical missions, coordinated an educational event to raise funds for nursing students’ emergency fund, and retired as a major in the Army Nurses Corps after serving during Desert Storm. Wanda embodies the spirit of Mrs. Moffett’s legacy through her commitment to excellent patient care, her leadership and inspiration of others, and service to others. Many CRNAs across the association are grateful to have been inspired, mentored, and taught by these four outstanding role models!



As the semester draws to a close, the students and faculty of the nurse anesthesia program have much for which to be thankful and excited. We are thrilled to welcome Dr. Maria Ledbetter, DNAP, CRNA as a full-time faculty member. Dr. Ledbetter comes from an obstetrical clinical background of twenty years. Maria has experience as a lecturer and has served as clinical adjunct faculty. We are excited that she has joined our team!

In early November, at the Ida Moffett School of Nursing Courage to Care Gala, four CRNAs were recognized for the vast contributions to our profession. Lynn Bailey received a Courage to Care award for his leadership both at Children’s and UAB and as a past president of the ALANA. “His leadership builds self-confidence in others and creates a caring environment that serves his patients and colleagues alike.” Libby Griffin received a Courage to Care award for her leadership and service as a CRNA since 1976. Along with her determination to get things done for patients and nurse



Dr. Maria Ledbetter, DNAP, CRNA

anesthesia students, she has volunteered with Habitat for Humanity in the building of 55 homes. John Morris, aka Santa, received a Courage to Care award for his leadership as chief CRNA or manager

During the fall semester, the nurse anesthesia students have been engaged in a variety of learning experiences. Simulation has been in full swing to include a wide range of opportunities from ultrasound-guided placement of central venous lines and peripheral nerve blocks to verification of placement of double-lumen tube using fiberoptic bronchoscope to induction sequence simulation in the OR. A unique experience involved an interprofessional acute care simulation involving 27 patients in a variety of units from labor and delivery, OR, ER, ICU, medical-surgical floor, and PACU. Nurse anesthesia students worked with students from undergraduate nursing, nurse practitioner, pharmacy, physical therapy, social work, communication science and disorders, and hospital administration to care for the patients in the College of Health Sciences Simulation Center. The experience provided opportunities to practice both technical and non-technical skills as well as collaborate with the healthcare team to optimize patient care.

The Class of 2018 is looking toward program completion, spending many hours in certification exam review, and continuing to gain excellent clinical experience with knowledgeable preceptors. In individual meetings with faculty, each senior student reviewed their case numbers and the plan to maximize clinical experience prior to graduation in May. With their Capstone projects completed in late September, they are focused on finishing strong. The Class of 2019 is finally completing the 'forever' first year of didactics and looking forward to applying all that information to patients outside of the simulation lab. They completed their first round of induction sequence simulations in early November; they will complete a week of clinical preparation under the guidance of Amy Snow prior to their first day of clinicals in early January.

On January 3, 2017, the Class of 2020, the final MSN cohort, will embark on their journey! In this cohort, we are welcoming 21 in-state students with four from Virginia, Mississippi, Illinois, and Georgia. They are coming equipped with excellent academic credentials and almost four years of critical care experience on average.

Outside the classroom, the service learning initiative continues for our students - to inform the students of professional, community, and ministry service opportunities and encourage involvement. Mrs. Cassie Brooks with Habitat for Humanity (<https://www.habitatbirmingham.org/>) shared with the students about the ministry's desire to "put God's love into action...to build homes, communities, and hope." Some junior students participated in a build day in mid-November. They had the wonderful experience of helping with finishing touches and participating in the dedication ceremony of a home. Director of e3 Mission Mobilization & Medical, Mrs. Anne Lucas, (e3partners.org) shared about opportunities to serve through a variety of avenues including medical missions, sport camps and community transformation. The Class of 2019 adopted an Angel Tree 10 year old boy and generously provided the means to an exciting Christmas morning. The final opportunity for service for the semester includes writing Christmas cards to military personnel and thank you notes to AANA Foundation donors.

Senior student Newt Tinsley had the opportunity to travel with Kenya Relief Team #22 to Migori, Kenya in November. Newt's comments, "There were two awesome CRNA's from Alabama on the mission trip. Paula Rawlinson Wood (Team Leader) who works at Southern Perioperative Services and Lisa C. Reich who works at UAB (along with two CRNAs from San Francisco and one from New York). They all were wonderful CRNAs who cared so much for their patients. They were very patient and knowledgeable mentors and teachers, and being the only student on the trip they took me under their wings." <https://www.facebook.com/1338315689/videos/10210978314117328/> Newt utilized funds from the Jackie H. Davis Medical Missions Fund to offset some of the cost of his trip. Thank you to Steve and Kenya Relief for the opportunity, to Paula and Lisa for mentoring, and to donors to the fund for your part in Newt's "unforgettable" experience.

The students who attended the AANA Annual Congress in September learned from the varied slate of speakers as well as from students from other programs. In mid-November, Amy Snow and Terri Cahoon had a poster presentation, "Service and knowledge in nurse anesthesia students after service learning program implementation," at the Southern Regional Educational Board (SREB) Commission on Collegiate Education for Nursing in Atlanta.

To all the incredible precepting, mentoring, teaching CRNAs across the state: Merry Christmas and Happy New Year from Samford nurse anesthesia students and faculty! See you in Destin!



SAMFORD STUDENT SUBMISSION

ANTERIOR CERVICAL DISCECTOMY AND FUSION WITH INTRAOPERATIVE NEUROPHYSIOLOGIC MONITORING

Caroline Huff, BSN

Ida Moffett School of Nursing, Samford University



Anterior cervical discectomy and fusion (ACDF) is common procedure with a relatively low complication rate. However, any surgical manipulation of the spine carries an associated risk of neurologic damage. Intraoperative neurophysiologic monitoring (IONM) can be used to evaluate neuronal integrity for ischemia and impending injury. Because anesthetic agents can alter IONM signals, anesthetic techniques must be adapted to minimize interference.

Case Report:

A 58-year old ASA III female presented with cervical spondylosis with radiculopathy for an ACDF of C5-6 and C6-7. Her past medical history included obesity, hyperlipidemia, hypertension and obstructive sleep apnea requiring continuous positive airway pressure at night. Her medications included atenolol, hydrochlorothiazide, atorvastatin, prochlorperazine and hydrocodone with acetaminophen. Preoperative laboratory data was unremarkable. An airway assessment revealed limited cervical range of motion with a sternomental distance of less than 12 cm and Mallampati classification of III.

Prior to induction, midazolam 2 mg was given intravenously (IV) and standard monitoring applied. Following preoxygenation, anesthesia was induced with IV doses of fentanyl 100 mcg, lidocaine 60 mg, propofol 130 mg and succinylcholine 120 mg. A GlideScope (Verathon Inc., Bothell, WA) provided a grade 1 view and the trachea was easily intubated. Somatosensory evoked potential (SSEP), motor evoked potentials (MEP) and electroencephalography (EEG) electrodes were placed by the electroneurodiagnostic technician and baseline data documented. Maintenance included end-tidal sevoflurane 0.7-0.9%, propofol 80-100 mcg/kg/min and remifentanyl 0.08-1 mcg/kg/min. Agents were titrated to EEG effect balancing adequate anesthetic depth and cerebral perfusion with minimal IONM interference. SSEPs and multi-channel MEPs signals remained robust throughout the procedure. Intermittent hypotension was treated with a total of phenylephrine 400 mcg. At closure, dilaudid 1 mg IV was administered and IONM, propofol, and remifentanyl were discontinued. On emergence, the patient was extubated awake, maintained airway patency and moved all extremities with equal strength.

Discussion:

ACDFs require meticulous surgical manipulation near the spinal cord with an associated risk of neurologic injury. Although considered a standard for many spinal procedures, only 6.9% of ACDF procedures in the United States are performed with IONM.^{1,2} A significant implication is the need for an anesthetic technique that will not interfere with clinically useful IONM.

Multimodal IONM with combined SSEP and MEP decreases the risk of paraplegia by 60% compared to historical methods.^{1,3} SSEPs monitor dorsal column (sensory) integrity with stimulation below the surgical site and measurement of the subsequent neurotransmission to the brain. A limitation is the inability to monitor the anterolateral spinal cord, so motor deficits can result without trend changes in SSEP signaling.⁴ MEPs monitor anterior corticospinal tract (motor) integrity with transcranial or direct spinal cord stimulation above the surgical site and measurement of peripherally-innervated muscle response. Controversy exists regarding MEP accuracy, but multi-channel MEPs, which monitor 8 or more muscles, enhance sensitivity and detection of motor deficits.² EEG assesses depth of anesthesia and cerebral perfusion by measuring the summation of excitatory and inhibitory neurotransmissions in the cerebral cortex.²

A 50% decrease in amplitude or a 10% increase in latency of EPs is typically indicative of ischemia.^{2,4} However, these

changes can also be attributed to fluctuations in anesthetic depth, hypoxia, hypercarbia, hypotension, hypothermia, or equipment malfunction.⁴ Maintaining consistent anesthetic depth and regulating hemodynamics with non-anesthetic agents help avoid ambiguity and misinterpretation of waveform changes.³ EEG tracings assist in anesthetic agent titration to sustain theta and delta wave activity and avoid burst suppression. Frequent, clear communication with the electroneurodiagnostic technician is crucial for appropriate anesthetic titration and signal interpretation.

Volatile anesthetics cause a dose-dependent decrease in amplitude and increase in latency that can mimic ischemic changes, but a 0.5 mean alveolar concentration of volatile agent permits adequate IONM conditions.⁴ Propofol causes a dose-dependent decrease in amplitude and increase in latency, but to a lesser extent than volatile agents. Opioids only marginally decrease amplitude and increase latency. Propofol and remifentanyl are valued for their short context-sensitive half-life, which allows for rapid emergence and early postoperative neurological assessment. A limitation of remifentanyl is the opioid-induced hyperalgesia that increases postoperative analgesic requirements, although there is evidence that this phenomenon is dose-dependent and may be diminished with slow discontinuation.⁴ The hyperalgesic effect of remifentanyl can be avoided with sufentanil, but because of its longer context-sensitive half-life, it should be discontinued earlier to avoid prolonged emergence. Neuromuscular blocking (NMB) agents prevent signal transmission during transcranial MEP stimulation; however, direct spinal cord stimulation is unaffected by NMBs and muscle relaxation is recommended to prevent gross motor movements.³

Despite the low complication rate of ACDFs, the gravity of potential neurological deficits calls for neuronal integrity monitoring. Multimodal IONM with SSEP and multi-channel MEPs provides greater sensitivity to ischemia than either modality alone and significantly decreases the risk of postoperative neurologic deficits. For IONM to be clinically useful, anesthetic techniques must be carefully tailored to reduce interference and provide a consistent anesthetic depth to ensure validity of signals.

References

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4. Gunter A, Ruskin KJ. Intraoperative neurophysiologic monitoring: Utility and anesthetic implications. *Curr Opinion Anesthesiol.* 2016;29(5):539-543.

MARK YOUR CALENDAR!

CRNA Week January 21-27, 2018

CRNA Legislative Day in Montgomery January 24, 2018

Nurses Day at the Capitol in Montgomery TBA

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AANA Annual Congress in Boston September 21-25, 2018

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Certified Registered Nurse Anesthetists

Every
BREATH *Every*
BEAT *Every*
SECOND



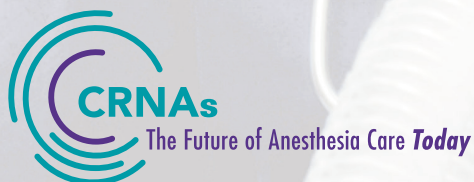
WE ARE THERE

As highly educated and skilled anesthesia experts, Certified Registered Nurse Anesthetists (CRNAs) stay with patients throughout their procedure to ensure their comfort and safety.

For the nation's 52,000 nurse anesthetists, providing patient-centered, holistic pain management and anesthesia care is both their profession and their passion.

CRNAs work in all practice settings, including rural and military, to provide safe and effective anesthesia care for every patient.

Celebrate
National CRNA Week
January 21-27, 2018



www.future-of-anesthesia-care-today.com | AANA.com



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UAB UPDATE



The University of Alabama at Birmingham Nurse Anesthesia Program is proud to announce that on December 16, 2017, we will graduate 34 excellent future CRNAs. These 34 have worked diligently over the past 28 months towards completion of their MSNs and will undoubtedly have the same success on the National Certification Examination. These students are highly sought-after as evidenced by the countless recruiting visits and catered lunches we have hosted for them from anesthesia groups and hospitals across the country. We thank each of them for choosing UAB Nurse Anesthesia and will honor them on Monday, December 11th at a small commencement ceremony. UAB looks forward to a fruitful relationship with them as alumni!

The UAB NA Class of 2018 has entered their second semester of

clinical education and is working towards developing their basic anesthesia skills. The Class of 2020, our first DNP class, is concluding their second semester of didactic training, and is likely in need of a nice break over the holidays!

In September, UAB Nurse Anesthesia interviewed candidates for admission from across the country and selected 40 future stars! This class will prove to be quite formidable and will continue to build on the success of their predecessors in the UAB NA program. Like the DNP cohort ahead of them, coursework will begin in May with one online semester, then they will move to Birmingham to begin their 11 months of intense face-to-face, on-campus training. We are looking forward to having them!

In September, the UAB delega-



tion to the AANA Annual Congress made the cross-country trek to Seattle, Washington including two students, Shelby Woltjen, BSN and Alicia Herges, BSN (pictured above). John Woods, BSN continued his work with the AANA Foundation, cementing his role as a wonderful ambassador for UAB and for CRNAs. Dr. Susan McMullan and Dr. Bryan Wilbanks attended as faculty representatives, but both achieved great things while in the Emerald City!

Susan P. McMullan, PhD, MSN, CRNA was awarded a prestigious AANA Foundation Post-Doctoral Fellowship for her research titled "The Psychometric Analysis of an Instrument to Measure the Concept of Workload for CRNAs". This fellowship will allow her to continue her research into CRNA workload, a component of patient safety and even job satisfaction. Additionally, as a part of the AANA Foundation State of the Science Oral Poster Session, Dr. McMullan presented her research "CRNA Perceptions of Factors Impacting Patient Safety", for which she also received a grant. Bryan Wilbanks, PhD, DNP, MSN,



CRNA was a member of the AANA Foundation Closed Claim Research Team, who were named the John F. Garde Researcher of the Year. This team built on previous work to enhance the closed claims research through exhaustive qualitative analysis. From this team, there have been over 100 presentations, 25 posters, and 10 publications pertaining to adverse anesthesia outcomes.

The ALANA Fall Meeting in October at Regions Park provided the first opportunity for our Class of 2020 to meet many of their future colleagues. We can certainly tell a difference in the demeanor of the students following this meeting. They have more of an interest in the profession and the protection of their rights as future practitioners. ALANA is doing a wonderful job in involving the students and teaching professionalism and advocacy even at the earliest interface. In this class, we certainly have some that will choose to serve and participation in events like the Fall Meeting and with ALANA as they continue their education at UAB will only strengthen the likelihood for service!

Fall at UAB is a fun time – especially now that football has returned to Birmingham! As a part of the Homecoming festivities, the UAB Nurse Anesthesia Program Class of 2020 participated in the Kickball Tournament. Our team was the “Propoballers”, which has become a bit of a tradition for our program. As you

can see in the photos, this class is a family and it speaks to the foundation of the UAB NA Program!

As we near the end of the year and Holidays, UAB Nurse Anesthesia is excited to announce that our family has grown a by a little. Two of our faculty members added new children to their homes since our last program update. Katie Woodfin, Director of Clinical Education, and her husband Taylor welcomed William Michael Woodfin on November 10, 2017. Todd Hicks, Associate Program Director, and his wife Jill had their third daughter, Davis Rowan Hicks, on October 24, 2017. The UAB NA Program will look forward to interviewing these potential candidates in the fall of 2041!

From the UAB Nurse Anesthesia Program, we wish you the happiest of holidays and that the joy and hope of the season makes the time your spend with your family and friends the best you've ever had! Go Blazers!



William Michael Woodfin



Davis Rowan Hicks

UAB STUDENT SUBMISSION

STRESS EXPERIENCED AS A STUDENT NURSE ANESTHETIST

Joel Bilbo, Alicia Herges, Lucrecia Lobo, Lance Murdock, and Paul Tower
University of Alabama at Birmingham



"I had a reoccurring dream where I'd be driving down the road with my boyfriend in the passenger seat. I looked over at him and realized that I'd forgotten to put the EKG leads on and that because of this he was going to die. It was awful. I'm so relieved to be done with the stress of school. It's much better now!"

Stress is the product of alterations to a person's normal life routines (Chipas, Cordrey, Floyd, Grubbs, & Miller, 2012). Unfortunately, normal life events that create stress are not placed on hold during graduate nurse anesthesia school. In addition to expected obstacles such as issues with personal health, family obligations, and unanticipated financial strains, students are faced with a nearly uniform loss of income coupled with tuition loans, decreased time with families, and the ever present fear of underperforming and not meeting didactic, clinical, and board certification requirements. Fortunately, while research has shown that this stress is common, so are methods to attenuate the effects of stress.

Background

Stress in and of itself is not necessarily negative. Stressors can prompt an individual to make changes to their environment that may ultimately prove to be beneficial. Stress is one of the driving factors in any competitive system. It is present regardless whether one is discussing a biological, financial, or educational situation. Stress in moderation, as opposed to excessive levels, is known to improve the effectiveness of learning (McKay, Buen, Bohan, & Maye, 2010). While stress can be a motivational factor under the proper conditions, it can also lead one to failure and despair (Perez & Carroll-Perez, 1999). Unhealthy stress levels that are not managed may induce instances of forgetfulness and depression, as well as malaise and fatigue (Chipas et al., 2012). One stress-inducing curriculum is the Masters of Nurse Anesthesia program (Chipas et al., 2012). Students enrolled in graduate nurse anesthesia programs frequently report low self-esteem coupled with high self-expectations of ability (Kless, 1989). In certain situations improperly managed stress can impede learning speed, and in extreme cases, may result in the inability of the student to complete the nurse anesthesia program (Kless, 1989).

A survey conducted in 1999 reported student registered nurse anesthetists (SRNAs) pooled data from 1,504 student responses. Of those who responded, 73% reported having experienced a major life crisis, and 21% reported having experienced a minor life crisis (Perez & Carroll-Perez). A more recent study reports on 1,374 SRNA participants (Chipas et al., 2012). Researchers found that nearly half of the SRNAs in the study reported depression, and that an astonishing 21% reported incidences of suicidal ideation occurring during their enrollment in the anesthesia program (Chipas et al., 2012). Specific stressors expressed by SRNAs included, but were not limited to, fear of dismissal from their program, body image issues, relationship difficulties with their spouse or significant other, inability to sleep, and financial problems (Phillips, 2010).

SRNAs also experience a shifting dynamic in their role within the hospital and the way they interact with fellow staff members. The students experience stress after being removed from an environment where they were comfortable and competent as registered nurses, now placed into a new setting where they are unfamiliar with protocols, appropriate actions, and were shouldered with an increased level of autonomy (Phillips, 2010). This role transformation is likely a contributing factor to additional student stress.

Attenuation

Multiple methods have been proposed to be helpful in alleviating the stress experienced during nurse anesthesia school. Caution must be taken by the SRNA to employ only positive methods of stress reduction such as those listed below, and to avoid negative coping strategies such as excessive consumption of alcohol, gossiping, self-criticism, and giving up (Chipas et al., 2012). Entering into an unfamiliar environment is often overwhelming and stressful. On average, stress levels peak during the initial five-month period of the SRNA experience (Chipas et al., 2012). In contrast, senior students who are transitioning out of their programs over the last three semesters are likely to feel overall lower levels of stress in comparison to less progressed students (Chipas et al., 2012; Phillips, 2010).

Negative stress can impact the student's physical, emotional, and mental health and wellness (Conner, 2015). Stress scores are shown to be markedly lower amongst SRNAs who exercise regularly in comparison to those who do not engage in routine physical activity; research supports SRNAs create personalized exercise programs and a provision of low cost gym access by colleges and universities (Chipas et al, 2012). Forming a peer group within which newly matriculated students can verbalize their stressors to one another and also receive feedback from senior students who are nearing the end of their program has been shown to have a "strongly positive" impact upon levels of stress (Kless, 1989).

Research also supports the use of mental healthcare professionals to reduce stress. However, one study of SRNAs reported nearly 20% of those surveyed used prescription medications in an effort to reduce stress (Chipas et al., 2012). Additionally, another study reports less than 10% of SRNAs have availed themselves to the stress management programs offered by their schools (Perez & Carroll-Perez, 1999). Future efforts should focus on student education of the benefit and availability of such programs.

Conclusion

The combination of common life stressors and nurse anesthesia education have a profound impact upon many students. Methods to attenuate this effect include communicating with senior or graduated students for support, engaging in healthy activity such as exercise and stress reduction programs, and participating in student wellness initiatives offered by schools such as counseling. It is the aim of these authors to educate future student nurse anesthetists that they are not alone, that their goals are attainable, that stress decreases as over time and the importance of seeking assistance when necessary.

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Medical Business Management

“CRNA Billing Specialist”

Contact: Joe Gribbin
1025 Montgomery Highway, Suite 100
Birmingham, AL 35216
205-979-5882
joegribbin@mbmps.com
www.MBMPS.com

ALABAMA BOARD OF NURSING UPDATE

LOAN REPAYMENT PROGRAM APPLICATION DEADLINE EXTENDED THROUGH DECEMBER

DAWN B. DANIEL, MSN, RN
DIRECTOR – ADVANCED PRACTICE
ALABAMA BOARD OF NURSING

Due to ABN computer system issues in November, the Board extended the deadline for applying for the Loan Repayment Program for Advanced Practice Nursing, originally set for Thursday, November 30, through 11:59 p.m. on Sunday, December 31. This should give all interested parties a fair opportunity to apply for the program.

Additionally, in light of reports that employers have expressed reluctance to sign the required Intent to Hire form, we altered the form to clarify that signing it does not represent a contract or offer of employment. Please use the new form when contacting prospective future employers.

The Loan Repayment Program offers loans to graduate students pursuing degrees to become CRNPs, CNMs, and CRNAs who agree to work full-time in an Area of Critical Need in Alabama for a period of at least 18 months for each year's worth of loans received. An Area of Critical Need is presently defined by the Board, according to the law, as any area of the state that is not within five (5) miles of an area identified by the US Census Bureau as "urbanized." Further information is available at www.abn.alabama.gov.

CRNA WEEK IS COMING. PLEASE MAKE IT COUNT!

CRNA week is January 21 -28, 2018 and we want to see how you're celebrating by posting a selfie with the hashtag #CRNASelfieSweepstakes. The post with the most likes will receive a \$100 Amazon gift card and 5 posts will be drawn at random to each receive a \$50 Amazon gift card.

Show your pride, spread awareness of CRNAs by posting on social media, and grab a chance to win prizes! #CRNASelfieSweepstakes from January 21-28, 2018!

**Only posts during 1/21-1/28/18 are eligible to win.*

WANT TO GET MORE INVOLVED? WANT TO BUILD YOUR LEADERSHIP SKILLS?

If you are passionate about your profession and would like to get involved and make a difference, please consider serving on the ALANA Board of Directors.

We are excited to announce the ALANA will have the President-Elect, Treasurer, 4 Board of Directors positions, and the Nominating Committee Chair to be filled next election.

The ALANA is looking for enthusiastic, energetic CRNAs that are willing to serve their profession by joining the Board of Directors.

If this describes you or someone you know, please forward the names of potential candidates or any questions to me at morganreaves@me.com.

ANESTHESIA ABSTRACTS

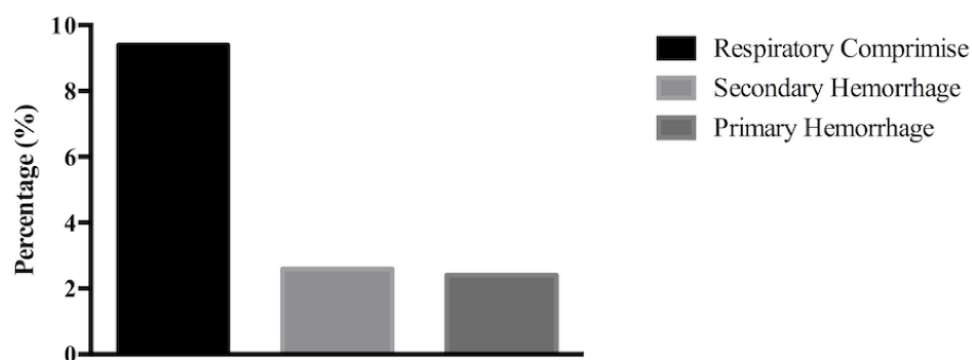
ADENOTONSILLECTOMY

COMPLICATIONS: A META-ANALYSIS

Pediatrics 2015;4:702-18DOI: 10.1542/peds.2015-1283De Luca

Canto G, Pachêco-Pereira C, Aydinöz S, Bhattacharjee R, Tan HL, Kheirandish-Gozal L, Flores-Mir C, Gozal D

Figure 2. Complications After Adenotonsillectomy



Abstract Purpose

The purpose of this study was to describe the type and frequency of complications after adenotonsillectomy, and to compare differences in complication rates between pediatric patients with and without Obstructive Sleep Apnea (OSA).

Background

The prevalence of OSA in children ranges from 1% to 5%. Adenotonsillectomy is one of the most common treatments for OSA. It is also used to treat recurrent tonsillitis. The most common complications after adenotonsillectomy include pain, nausea, vomiting, and dehydration. More serious

complications include hemorrhage, respiratory complications, subglottic stenosis, and death. Some investigators have found differences in adenotonsillectomy postoperative complication rates between OSA and non-OSA patients. Not surprisingly, higher rates of respiratory complications have been found in pediatric patients with OSA, whereas those without OSA have higher hemorrhage rates, which may be related to increased risk of bleeding due to recurrent infections. This meta-analysis described complication rates after adenotonsillectomy and compared complication rates in those with and without OSA.

Methodology

The investigators conducted a systematic review and meta-analysis of clinical studies that evaluated postoperative complications within 3 weeks after adenotonsillectomy in children aged 0 years to 18 years with and without OSA. A complication was defined as any deviation from the usual postoperative course that required intervention. The authors excluded studies that included patients with genetic syndromes (e.g., Down's Syndrome), coagulation disorders, or cerebral palsy. Two investigators used the Meta-Analysis of Statistics Assessment and Review Instrument to evaluate the quality of each study selected for review. Statistical analysis was appropriate.

Result

A total of 23 studies were included in this meta-analysis. Of these 23 studies, only 4 met inclusion criteria for comparison of patients with and without OSA. Study sample sizes ranged from 102 to 9,023 patients. Reported complications included:

- respiratory complications
- hemorrhage
- pain
- nausea
- vomiting
- refusal to drink
- inadequate oral intake
- dehydration
- fever
- dysphagia
- cardiac complications

The overall complication rate after adenotonsillectomy in pediatric patients was 19% (N = 13,357). The most common complication was respiratory (9.4%, N = 3,148 cases; Figure 1). Primary hemorrhage rate (within first 24 hours) was 2.4%. The secondary

hemorrhage rate (after 24 hours) was 2.6%.

There were 371 patients in the analysis comparing respiratory complications in children with ($n = 184$) and without ($n = 187$) OSA. Children with OSA were almost five times more likely to experience a respiratory complication than children without OSA ($OR = 4.9$, $P < 0.05$; Figure 2). Examples of respiratory complications included:

- desaturation
- laryngospasm
- need for supplemental oxygen
- supraglottic obstruction
- need for oral or nasal airway
- pulmonary edema

In examining bleeding complications, there were 360 patients with OSA and 294 without. Meta-analysis confirmed that bleeding rates were significantly lower in children with OSA ($OR = 0.4$, $P < 0.05$; Figure 2).

Conclusion

The most common complications after adenotonsillectomy were respiratory complications and delayed hemorrhage. Pediatric patients with known or suspected OSA had a five-fold higher rate of respiratory complications. Non-OSA patients had a higher rate of postoperative hemorrhage.

Comment

When I was learning anesthesia, a mentor of mine taught me to always ask the surgeon why the child was having a tonsillectomy. Was it for recurrent tonsillitis or OSA? If it was OSA we would limit our fentanyl administration to $1 \mu\text{g/kg}$; if not we might give upwards of $3 \mu\text{g/kg}$ fentanyl. The reason, which should not be surprising to any, and as demonstrated by this study, is that children with OSA have significantly higher rates of respiratory complications after adenotonsillectomy. Patients with OSA are more sensitive to the respiratory depressant effects of opioids. Postoperatively, adenotonsillectomy patients can have copious nasal secretions and reactive, postsurgical edema in the adenoid and tonsillar beds. Therefore, it is essential that anesthesia providers attempt to determine the severity of OSA and work with the surgeon to develop a postoperative plan that reduces the risk



of complications. If the child has known or suspected severe OSA, then one should consider minimizing opioids and overnight admission for respiratory monitoring.

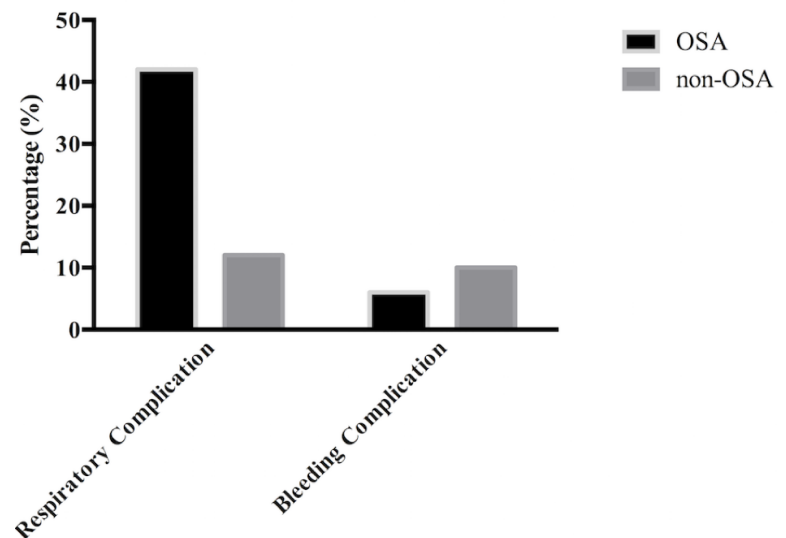
Dennis Spence, PhD, Crna

The views expressed in this article are those of the author and do not reflect official policy or position of the Department of the Navy, the Department of Defense, the Uniformed Services University of the Health Sciences, or the United States Government.

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Figure 1. Frequency of Complications after Adenotonsillectomy



Note: Overall complication rate was approximately 19%.
 $N = 13,357$



PLEASE JOIN OUR 5K TEAM
ALABAMA CRNAS FOR THE RED SHOE RUN
BENEFITING THE RONALD MCDONALD HOUSE

JANUARY 27, 2018
5K STARTS AT 8:00 AM
ROSEWOOD HALL
HOMWOOD, AL

Team Leader: Krista
Niedermeier (kristan7@gmail.com
if you have any questions)

Team Name: Alabama CRNAs
Cost is \$30.00 if you sign up before
Jan. 1st (price increases to \$35 as
of Jan. 1st)

Register at
www.redshoerun-bham.org

Support the Ronald McDonald
House and let's show
Birmingham how great the
Alabama CRNAs are!

Every **BREATH** *Every* **BEAT** *Every* **SECOND**





WE ARE THERE

CONGRATULATIONS TO THE ALANA DISTINGUISHED SERVICE AWARD WINNERS!

- *Joe Knight*
- *Resa Culpepper*
- *John Morris*
- *Shannon Scatturo*
- *Elaine Klein*
- *Anne Beddow*
- *Joe Williams*
- *Janice Drake*

UPCOMING AANA MEETINGS:

Nurse Anesthesia Annual Congress
September 8-12, 2017
Washington State Convention Center
Seattle, WA

September 21-25, 2018
Hynes Convention Center
Boston, MA

August 9-13, 2019
Hyatt Regency Chicago
Chicago, Ill

August 15-18, 2020
San Diego, CA

DEAR MEMBERS AND PAC CONTRIBUTORS:

THANK YOU! I would like to start by thanking everyone who joined us for a family fun night with the Barons, our first PAC only event. It was a great game night with gorgeous weather and great networking for all those who attended with their families. We were able to raise funds for Alabama CRNA PAC. The credit for this successful fundraiser goes to all the members who contributed and the PAC committee who pulled it together to provide a casual, fun night of networking. I would like to invite everyone and their families to our next year's "Family Fun Night with the Barons" on Aug 18th 2018. Mark your calendar and plan to have a great time networking with your fellow CRNAs and coworkers.

ALANA Spring meeting is almost here and as always, we are looking forward to providing you with a fun filled beach party and live auction. Please don't forget to visit us at the PAC booth and see what we have in store for your entertainment. As you all are well aware, ALANA is a determined advocate for CRNAs concerning issues such as patient safety, access to quality healthcare services, scope of practice, educational funding, reimbursement, and many other legislative and regulatory matters in the State of Alabama. Your membership dues help ALANA achieve these goals among many others.

The ALANA CRNA Political Action Committee (AL-CRNA PAC) strengthens the profession's voice in Montgomery. Your membership dues do not go towards PAC funds. It is funded by the voluntary contributions of CRNAs, and governed by a CRNA-PAC Committee comprised of CRNAs, the CRNA-PAC makes contributions to the state political campaigns of CRNA-friendly candidates for the Alabama House and Senate, and to State legislators particularly influential on health-care issues important to CRNAs and their patients. Neither a Republican nor a Democratic PAC, the CRNA-PAC is the PAC focused solely on advancing the interests of nurse anesthesia in Alabama.

This being an election year, AL-CRNA PAC is depending on your continued support and monetary contributions. Your contribution allows us to represent your profession in Montgomery and provides us a seat at the table when policies and legislature that directly affects your livelihood is being debated and discussed.

I am looking forward to your continued support by thinking about making a one-time donation or becoming "buck-a-day donor" at <http://www.alabamacrna.org/ala-crna-pac>



Salima Mulji, MNA, CRNA