



PERSONAL INFORMATION

Name: Daniel Rosenkrans

Work Address: N2198 UNC Hospitals, CB#7010, Chapel Hill, North Carolina 27599-7010

Work Phone: (919) 966-5136

EDUCATION

POST GRADUATE

07/2019 - 07/2020	Duke University Medical Center Durham, NC Department of Anesthesiology Chair: Joseph Mathew, MD Director: Quintin Quinones, MD	Critical Care Medicine Fellowship
07/2018 - 07/2019	Duke University Medical Center Durham, NC Department of Anesthesiology Chair: Joseph Mathew, MD Director: Brandi Bottiger, MD	Adult Cardiothoracic Anesthesiology Fellowship
06/2014 – 07/2018	University of North Carolina Hospitals Chapel Hill, NC Department of Anesthesiology Chair: David Zvara, MD Director: Harendra Arora, MD	Anesthesiology Residency

GRADUATE

08/2010 – 05/2014	Southern Illinois University School of Medicine Springfield, IL	Doctor of Medicine
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UNDERGRADUATE

08/2005 – 05/2009	Augustana College Rock Island, IL	Bachelor of Arts, Biology & Pre-Medicine
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CERTIFICATIONS/LIENSURE

Board Certification	Critical Care Medicine	valid through (12/31/2030)
Board Certification	Advanced Perioperative TEE	valid through (12/31/2029)
Board Certification	Anesthesiology	valid through (12/31/2029)

Other Certification	Pediatric Advanced Life Support	valid through (02/2024)
Other Certification	Advanced Cardiac Life Support	valid through (12/2023)
Other Certification	Basic Life Support	valid through (12/2023)
Other Certification	Lean Six Sigma: Yellow Belt	Obtained 2014
Medical Licensure	North Carolina Medical Board	valid through (01/04/2024)

PROFESSIONAL EXPERIENCE

09/2022 – Present	Clinical Assistant Professor	University of North Carolina Critical Care Medicine Division Department of Anesthesiology
02/2021 – 08/2022	Adjunct Clinical Assistant Professor	Rocky Vista University School of Osteopathic Medicine
08/2020 – 08/2022	Anesthesiologist & Intensivist	University of Colorado Hospitals Department of Anesthesiology

HONORS

02/01/2023	Best “On-the-Fly” Teacher	University of North Carolina Department of Anesthesiology
07/01/2019	Chief Fellow	Duke University Medical Center Department of Anesthesiology
06/09/2018	Outstanding Medical Student Teaching Award	University of North Carolina Department of Anesthesiology
06/09/2018	George Sheldon Leadership Award	University of North Carolina Department of Anesthesiology
07/01/2017	Chief Resident	University of North Carolina Department of Anesthesiology
09/25/2013	Alpha Omega Alpha Medical Honor Society	Southern Illinois University School of Medicine

BIBLIOGRAPHY AND PRODUCTS OF SCHOLARSHIP

BOOK CHAPTERS:

1. Smith, K. & **Rosenkrans, D.** Keeping babies warm in the perioperative period is important, challenging and at times dangerous! Avoiding Common Anesthetic Errors, 2nd Ed. Lippincott Williams & Wilkins (PA). 2020. 2p.

REFEREED (PEER – REVIEWED) PUBLISHED PRODUCTS OF SCHOLARSHIP:

Research

1. **Rosenkrans D,** Kumar PA. Pro: General Anesthesia Should Be Used for Transcatheter Aortic Valve Replacement. J Cardiothorac Vasc Anesth. 2023 May;37(5):827-828. PMID: 36732131.
2. Nicoara, A. Cooter Wright, M. **Rosenkrans, D.** Patel, CB. Schroder, J. Cherry, A. Hashmi, N. Pollak, A. McCartney, S. Katz, J. Milano, C. Podgoreanu, M. Predictive capabilities of the European registry for patients with mechanical circulatory support right-sided heart failure risk score after left ventricular assist device implantation. J Cardiothorac Vasc Anesth. 2022 Oct;36(10): 3740-3746. PMID: 35871044.

3. **Rosenkrans, D.** Qi, W. Cooter, M. Waldron, N. Cherry, A. McCartney, S. Hashmi, N. Schroder, J. Milano, C. Bishawi, M. Podgoreanu, M. Nicoara, A. EUROMACS-RHF risk score and 3D echocardiography as predictors of right heart failure after left ventricular assist device implantation. *J Heart Lung Transplant*. 2020 Apr; 39(4S): S403-S404.
4. **Rosenkrans, D.** & Kolarczyk, L. Intraoperative Hyperkalemia and Ventricular Arrhythmia During Parathyroidectomy. *Anesthesia & Analgesia*. 2017 Aug; 9(4): 105-108. PMID: 28622150.
5. **Rosenkrans, D.** Klamen, D. Roberts, N. The Learning Culture in Third Year Clerkships: Medical Students' Perceptions Through a Coaching Lens. *MedEdPublish*. 2015 Jan; 4(16).

REFEREED (PEER-REVIEWED) OTHER PRODUCTS OF SCHOLARSHIP:

1. Farawi, A. Kolarczyk, L. Smeltz, A. **Rosenkrans, D.** Right Ventricular Failure During Mechanical Embolectomy: A Tale of Multiple Insidious Insults. Society of Cardiovascular Anesthesiologists Annual Meeting 2023. Portland, Oregon. April 2023.
2. Behrens, M. Cooter, M. **Rosenkrans, D.** Ghadimi, K. Milano, C. Podgoreanu, M. Nicoara, A. Right ventricle-pulmonary artery coupling as a predictor of right ventricular failure after left ventricular assist device placement. Society of Cardiovascular Anesthesiologists Annual Meeting. West Palm Beach, Florida. April 2020.
3. **Rosenkrans, D.** Qi, W. Cooter, M. Milano, C. Podgoreanu, M. Nicoara, A. Predictive Capabilities of the European Registry for Patients with Mechanical Circulatory Support – Right Heart Failure Risk Score after Left Ventricular Assist Device Implantation. Accepted for presentation at Society of Cardiovascular Anesthesiologists Annual Conference. West Palm Beach, FL. April 2020.
4. **Rosenkrans, D.** Qi, W. Cooter, M. Waldron, N. Cherry, A. McCartney, S. Hashmi, N. Schroder, J. Milano, C. Bishawi, M. Podgoreanu, M. Nicoara, A. EUROMACS-RHF risk score and 3D echocardiography as predictors of right heart failure after left ventricular assist device implantation. Accepted for presentation at The International Society for Heart and Lung Transplantation. Montréal, Canada. April 2020.
5. **Rosenkrans, D.** Barrick, B. Teeter, E. Oh, the Places a Valve Can Go: A Tale of Two TAVRs. Society of Cardiovascular Anesthesiologists Annual Conference. Phoenix, AZ. May 2018.
6. **Rosenkrans, D.** Heniser, E. Gue, J. Mozingo, C. Howard, C. Rowan, C. Securing Nerve Block Catheters for Acute Pain. Quality improvement process leader. American Society of Anesthesiologists Annual Meeting. Boston, MA. October 2017.
7. **Rosenkrans, D.** Long, J. Kolarczyk, L. Traumatic Tracheal Perforation from Crush Injury: Anesthesia and Surgical Consideration. Society of Cardiovascular Anesthesiologists Thoracic Anesthesia Symposium. Orlando, FL. April 2017.
8. Balfanz, G. Blasius, K. **Rosenkrans, D.** Specht, B. Cobb, K. Isaak, R. In-situ Simulation Program in GI Procedures Suite Improves Application of Crisis Resource Management Principles. International Meeting on Simulation in Healthcare. Orlando, FL. January 2017.
9. Hodnett, J. **Rosenkrans, D.** Piscitello, J. McNaul, P. Balfanz, G. Implementation of an Updated UNC Hospitals Standard Surgical Blood Order Schedule and UNC Intraoperative Blood Product Transfusion Best Practice Guidelines. ASA Annual Meeting. Chicago, IL. October 2016.
10. **Rosenkrans, D.** Teeter, E. Kolarczyk, L. Caranosas, T. Kyle, R. Anesthetic Monitoring Directly Impacts Patient Outcome During Novel Suprasternal TAVR Approach. Society of Cardiovascular Anesthesiologists. San Diego, CA. April 2015.

REFEREED UNPUBLISHED ORAL PRESENTATIONS/ABSTRACTS:

Oral Presentations:

1. Pollak, A. **Rosenkrans, D.** Schilf, C. Seay, T. Zvara, J. Bottiger, B. Does Intraoperative Resuscitation after CPB Reduce Initial ICU Metabolic Acidosis? Academic Evening. Duke University Hospital Systems, Durham, NC. May 2019. (Invited)
2. **Rosenkrans, D.** Heniser, E. Gue, J. Mazingo, C. Howard, C. Rowan, C. Securing Nerve Block Catheters for Acute Pain. Quality improvement process leader. Awarded 1st place for project design and execution. Resident Symposium for Quality Improvement. UNC. Chapel Hill, NC. May 2017. (Invited)
3. **Rosenkrans, D.** & Weyers, W. Identifying Current Practices for Routine Delirium Screening in the SICU. Academic Medicine Symposium. UNC. Chapel Hill, NC. November 2014. (Invited)
4. **Rosenkrans, D.** Coaching vs. Teaching: A Proposal for Undergraduate and Graduate Medical Education. 5th Annual Symposium on Teaching and Learning. SIU. Springfield, IL. April 2014. (Invited)
5. **Rosenkrans, D.** Ryan, D. Robinson, B. Markwell, S. Fritz, A. Freitag, P. One-Level Axial Lumbar Interbody Fusion: Does Order Placement of Hardware Matter? 23rd Annual Research Symposium. SIU. Springfield, IL. March 2013. (Invited)

Panels:

1. **Rosenkrans, D.** and Eskildsen, J. Speaker. Life in Private Practice. 2023 Transition to Practice Seminar. Chapel Hill, NC. 3/4/2023 (Invited)
2. **Rosenkrans, D.** Speaker. The Hiring Process. 2023 Transition to Practice Seminar. Chapel Hill, NC. 3/4/2023 (Invited)

Workshops:

1. **Rosenkrans, D.** Haithcock, B. Teeter, E. Kolarczyk, L. Critical Procedural Skills. Given at: Society of Cardiovascular Anesthesiologists Thoracic Anesthesia Symposium. Chicago, IL. May 17, 2019. (Invited)
2. **Rosenkrans, D.** Long, J. Teeter, E. Kolarczyk, L. Chest Decompression: Tubes, Needles and Emergencies. Given at: Society of Cardiovascular Anesthesiologists Thoracic Anesthesia Symposium. Orlando, FL. April 27, 2018. (Invited)

TEACHING ACTIVITIES

05/8/2023	Mock Oral Board Examiner
05/8/2023	Mock Oral Board Examiner
04/19/2023	Mock Oral Board Examiner
02/09/2023	Medical Student Shadowing Day Attending
11/16/2022	Mock Oral Board Examiner
11/16/2022	Mock Oral Board Examiner
04/2021	Objective Structured Clinical Exam (OSCE) Scenario Grader
02/2021 – 08/2022	CT Anesthesia & ICU Immersive Elective Creator & Director University of Colorado Hospitals, Department of Anesthesiology

12/2020 – 08/2022 Deep Dives with Dan
Creator & Director
University of Colorado Hospitals, Department of Anesthesiology

LECTURES

LECTURES TO MEDICAL STUDENTS:

University of North Carolina School of Medicine

05/31/2023 “ECMO Weaning and Decannulation”
CVTICU Lecture Series

05/29/2023 “ECMO Physiology and Cannulation Strategies”
CVTICU Lecture Series

LECTURES TO RESIDENTS:

Department of Anesthesiology, University of North Carolina

6/12/2023 “Cardiovascular System and Hemodynamic Management”
CA1 Orientation Lecture

05/30/2023 “ECMO Physiology and Cannulation Strategies”
CVTICU Lecture Series

04/13/2023 “ECMO Physiology and Cannulation Strategies”
CVTICU Lecture Series

4/4/2023 “Cardiac Pharmacology”
Basic Board Prep Series

03/21/2023 “ECMO Physiology and Cannulation Strategies”
CVTICU Lecture Series

03/09/2023 “Focused Cardiac Ultrasound”
POCUS Lecture Series

02/21/2023 “ECMO Physiology and Cannulation Strategies”
CVTICU Lecture Series

02/02/2023 “Advanced Point of Care Ultrasound Workshop for Anesthesiology Residents”
Workshop Instructor

01/20/2023 “TEE Review Series”
Basic Perioperative TEE Review Course

12/08/2022 “Effective Communication & Conflict Resolution”
Academic Medicine Rotation for Clinical Base Year Residents (PGY-1)

11/07/2022	"Hemodynamic Instability" CVTICU Lecture Series
10/31/2022	"ECMO Physiology and Cannulation Strategies" CVTICU Lecture Series
10/28/2022	"Right Ventricular Dysfunction – multidimensional approach" CVTICU Lecture Series
09/29/2022	"Hemodynamic Monitoring with LVAD" CVTICU Lecture Series
09/27/2022	"Inotropes and Mechanical Assist Devices" CVTICU Lecture Series

GRAND ROUNDS (UNC)

5/31/2023	"Residency Education Update" Department of Anesthesiology
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CONTINUING EDUCATION LECTURES (UNC):

12/09/2022	"Targeted Temperature Management" CT Coffee Rounds University of North Carolina
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CONTINUING EDUCATION LECTURES (OUTSIDE UNC):

4/12/2023	"Post-Cardiopulmonary Bypass Syndrome" Tar Heel Bootcamp 2023 Chapel Hill, NC
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MENTORSHIP EXPERIENCES:

Department of Anesthesiology, University of North Carolina

2023 – Present	Faculty Mentor Medical Student: Kevin Welch
2022 - Present	Faculty Mentor Medical Student: Carlos Jimenez Rosado
2022 - Present	Faculty Mentor Resident: Mike Wisniewski
2022 - Present	Faculty Mentor Medical Student: Joshua Romero

ATTENDING ON CLINICAL SERVICE

Department of Anesthesiology, University of North Carolina

10/2022 – Present	Attending Intensivist, CVTICU
09/2022 – Present	Attending Cardiothoracic Anesthesiologist
09/2022 – Present	Attending Anesthesiologist

PROFESSIONAL SERVICE

To Discipline:

11/2021 – 08/2022	Cardiac and Endovascular Service Line Accreditation Committee University of Colorado Hospitals, Department of Anesthesia Role: Member
02/2021 – 08/2022	Anesthesia Governance for Epic Optimization University of Colorado Hospitals, Department of Anesthesia Role: Co-Director
12/2020 – 08/2022	Enhanced Recovery after Thoracic Surgery University of Colorado Hospitals, Department of Anesthesia Role: Member

Within University of North Carolina, Chapel Hill:

UNC Department of Anesthesiology Committees

02/2023 – Present	Clinical Competency Committee, Member
02/2023 – Present	Program Evaluation Committee, Member
02/2023 – Present	TEACHER Lab Committee, Member
09/2022 – Present	Pain/Anesthesia P&T Subcommittee, Member

UNC Department of Anesthesiology: Other Administrative Activities

06/2023	Faculty Interviewer
06/2023 – Present	Sugammadex & Aprepitant Quality Improvement Project – Physician Leader
05/2023 – Present	Resident Point of Care Ultrasound Bootcamp Coordinator
05/2023 – Present	Resident Controlled Substance Monitoring
04/2023	Creation of 2023-2024 Resident Block Schedule
02/2023 – Present	Enhanced Recovery After Cardiac Surgery, Anesthesia Leader
02/2023 – Present	Resident Basic and Advanced Board Prep Series Coordinator
02/2023 – Present	Resident Journal Club Series Coordinator
02/2023 – Present	Assistant Residency Program Director
02/2023 – Present	Enhanced Recover after Cardiac Surgery – Anesthesia Lead
12/2022 – Present	CT Coffee Rounds Co-director
11/18/2022	Resident Virtual Recruitment Event Participant

Diversity, Equity and Inclusion Activities:

Participation in yearly DEI training:

- Unconscious bias and implicit bias education as part of UNC Department of Anesthesiology Grand Rounds.

RESEARCH STATEMENT

As an anesthesiologist, my primary research interest is exploring the use of inotropic medications in patients receiving durable left ventricular assist devices (LVADs) and their impact on perioperative outcomes, including acute kidney injury. Specifically, I am interested in examining national variations in administering these medications and identifying which inotropic drug would achieve the best outcomes for specific patient populations. To accomplish this research goal, I plan to utilize the multicenter perioperative outcomes group database, which contains a large and diverse patient population with LVADs. This research is the beginning of a project attempting to develop an evidence-based individualistic approach to administering inotropes in patients with LVADs.

In addition to my interest in inotropic medications, I am passionate about researching effective educational methods to improve the residency curriculum. As medical educators, I believe we are responsible for providing residents with the best possible training to prepare them for the ever-changing field of anesthesiology. My research aims to identify the most effective educational methods to ensure that our residents receive a comprehensive and well-rounded education.

Other contributions underway include a study of a medication bundle to prevent postoperative atrial fibrillation, a review article of recent literature published regarding non-intubated video-assisted thoracic surgery, a chapter on Rh antigen groups and their clinical implications, a case series of LVAD patient's undergoing electroconvulsive therapy, and an article investigating the performance of artificial intelligence on anesthesiology oral board examinations.

TEACHING STATEMENT

As an assistant professor and assistant residency program director for the department of anesthesiology, my role is to guide and mentor the next generation of anesthesiologists through their training. I am committed to providing an engaging and challenging learning experience that prepares residents for their future careers in the field.

I strive to create a culture of excellence where learners are challenged to be their best and provided with the necessary resources to succeed. As assistant residency program director, I oversee the board review series, academic curriculum, objective structured clinical examinations, and simulation activities. In addition, I work closely with other faculty members to ensure that the curriculum is up-to-date, relevant, and meets the needs of our trainees. I aim to create an environment that is supportive and encouraging while also being rigorous and demanding.

My teaching philosophy is consistent with deliberate practice, which involves breaking complex skills into manageable parts, practicing them, and receiving timely feedback from experienced practitioners. I believe this approach helps learners develop a deeper understanding of the material and master the skills needed to be an anesthesiologist. I am committed to implementing deliberate practice in my daily teaching activities through lectures to residents and medical students or one-on-one mentoring and coaching.

I recognize the importance of staying current with the latest developments in anesthesiology, and I prioritize attending conferences, reading contemporary literature, and engaging with colleagues in the field. Combining

cutting-edge information with proven education techniques fosters a challenging, rewarding, and ultimately transformative educational environment. Through education, we can forge outstanding anesthesiologists who will significantly impact our patients' lives.

DIVERSITY, EQUITY, AND INCLUSION STATEMENT

Diversity, equity, and inclusion are essential values that I prioritize professionally and personally. As a physician, I am committed to increasing access to healthcare for all individuals, regardless of their ability, gender, race, socioeconomic status, or religion.

I recognize the role that systemic bias plays in perpetuating healthcare disparities and understand that it is my responsibility to become aware of my own internal biases and actively work to dismantle them. Therefore, I am committed to ongoing education and training to deepen my understanding of biases and to apply that knowledge to improve patient outcomes and experiences.

I strive to create an inclusive environment for all individuals. This includes actively seeking out diverse perspectives and experiences and engaging in respectful and compassionate communication with patients from all backgrounds.

In all of my interactions with patients, colleagues, and the wider community, I am committed to upholding the principles of diversity, equity, and inclusion. By working together, we can create a more just and equitable healthcare system that serves all individuals equally.