

## Barbara-Jo Achuff, MD, FAAP, FAMIA

barbarajoachuffmd@gmail.com  
4906 Colorado Ave, Nashville, TN 37209  
Office/Mobile: (615) 241-0746



---

### PROFESSIONAL SUMMARY

Dual board-certified Pediatric Critical Care and Clinical Informatics physician with over 25 years of experience in high-acuity medical environments. Currently serving as Associate Professor at Vanderbilt School of Medicine with joint appointments in Pediatrics and Biomedical Informatics. Specialist in cardiac intensive care, sedation stewardship, and the application of visual analytics to improve patient outcomes. Distinguished career includes fellowship training at The Children's Hospital of Philadelphia (CHOP) and leadership roles at Texas Children's Hospital.

---

### BOARD CERTIFICATIONS & LICENSURE

- **Clinical Informatics:** American Board of Preventive Medicine (ABPM), 2023
- **Pediatric Critical Care Medicine:** American Board of Pediatrics (ABP), 2014
- **Pediatrics:** American Board of Pediatrics (ABP), 1999; recertified 2006, 2017
- **Medical Licensure:**
  - Tennessee: 68128 (2023–Present)
  - Texas: Q5316 (2015–Present)
  - Pennsylvania: MD065315L (1999–2015)

---

### ACADEMIC & HOSPITAL APPOINTMENTS

#### Vanderbilt School of Medicine | Monroe Carell Jr. Children's Hospital | Nashville, TN

- **Associate Professor** - Department of Pediatrics, Division of Critical Care Medicine (Aug 2023–Present)
- **Associate Professor** - Department of Biomedical Informatics (Aug 2023–Present)
- **Staff Physician** - Monroe Carell Jr. Children's Hospital at Vanderbilt (Aug 2023–Present)

#### Baylor College of Medicine | Texas Children's Hospital | Houston, TX

- **Adjunct Professor** - Department of Pediatrics, Division of Critical Care Medicine (Jun 2023–Aug 2024)
- **Associate Professor** - Department of Pediatrics, Division of Critical Care Medicine (Jun 2022–Jun 2023)
- **Assistant Professor** - Department of Pediatrics, Division of Critical Care Medicine (Jun 2015–Jun 2022)
- **Staff Physician** - Texas Children's Hospital (Jul 2015–Present)

#### The Children's Hospital of Philadelphia (CHOP) | Philadelphia, PA

- **Cardiac Intensive Care Hospitalist** (2009–2011)
- **Staff Physician** (Jun 2009–Jun 2015)

#### Nemours/Alfred I. DuPont Hospital for Children at Bryn Mawr Hospital | Bryn Mawr, PA

- **Pediatric Hospitalist** (2002–2009)

*Date Updated: March 15, 2026*

---

## EMPLOYMENT

- **Pediatric Associates of Plymouth** | Plymouth Meeting, PA | General Pediatrician, Sept 1999–2002
- **Nemours/Alfred I. DuPont Hospital for Children** | Bryn Mawr, PA | Pediatric Hospitalist, 2002–2009
- **The Children’s Hospital of Philadelphia** | Philadelphia, PA | Cardiac Intensive Care Hospitalist, 2009–2011

---

## EDUCATION & TRAINING

### **The Children’s Hospital of Philadelphia** | Philadelphia, PA

- **Advanced Fellowship:** Cardiac Intensive Care Medicine (2014–2015)
- **Fellowship:** Pediatric Critical Care Medicine (2011–2014)
- **Residency:** Pediatrics (1996–1999)

### **Jefferson Medical College** | Philadelphia, PA

- **Doctor of Medicine (M.D.), *Magna Cum Laude***, Alpha Omega Alpha (1992–1996)

### **Pennsylvania State University** | University Park, PA

- **Bachelor of Science**, Premedicine, *High Distinction* (1989–1992)

### **Ursinus College** | Collegeville, PA

- **Non-Degree:** (1988–1989)

---

## PROFESSIONAL CERTIFICATIONS

- **Physician Builder** - EPIC Systems (Verona) - Certificate: 1184468685 (Nov 2024)
- **Notecraft for Physician Builders** - EPIC Systems (Verona) - Certificate: 1184468684 (Oct 2024)

---

## PROFESSIONAL ORGANIZATIONS

- **Alpha Omega Alpha** - Alumni Member
- **American Academy of Pediatrics** - Fellow
- **Society of Critical Care Medicine** - Member, Participant
- **Pediatric Cardiac Intensive Care Society** - Member, Participant
- **American Medical Informatics Association (AMIA)** - Fellow, Member, Participant
- **Pediatric Centers of Artificial Intelligence in Medicine (PCAIM)** - Member, Participant

---

## SELECTED HONORS & AWARDS

- **Norton Rose Fulbright Faculty Excellence Award** - Development of Enduring Educational Materials, April, 2021
- **STAR Award Recognition** - Society of Critical Care Medicine (SCCM), February, 2018
- **Gold Snapshot Award** - Society of Critical Care Medicine (SCCM), February, 2018
- **Joseph Collins Foundation Scholarship** - Jefferson Medical College, 1992–1996
- **Warren C. Bartroff Scholarship** - Jefferson Medical College, 1992–1996

- **O'Brien Scholarship** - Jefferson Medical College, 1992–1996
  - **Hobart Armory Hare Honor Society** - Jefferson Medical College, 1994
- 

## PROFESSIONAL ACTIVITIES

- **Intramural**
    - **Texas Children's Hospital Sedation Oversight Committee** – Member, March, 2017–January, 2023; Co-Director, January, 2023–Present
    - **Sedation Stewardship Committee** – Leader, Cardiac Critical Care, October, 2015–Present
    - **Pediatric Extracorporeal Outcomes Registry (PEDECOR)** – Member, January, 2016–June, 2019
  - **Extramural**
    - **Pediatric Critical Care Medicine (PCCM)** – Ad Hoc Reviewer, July 2015–Present
    - **Pediatric Cardiac Critical Care Consortium Quality (QI-PC4) COMFORT Task force** – Section Leader, Analgesia and Sedation Practices, September, 2019–Present
    - **Cardiology in the Young** – Ad Hoc Reviewer, July 2022–Present
    - **JAMAPeds** – Ad Hoc Reviewer, 2023–Present
    - **World Journal for Pediatric and Congenital Heart Surgery** – Ad Hoc Reviewer, May, 2019
  - **Other Professional Activities**
    - Specialized training following academic appointment:
      - Communication and Relationships Workshop, BRET Office of Career Development at Vanderbilt University, November, 2024
      - Mentor Training for Biomedical Researchers, NIH's National Research Mentoring Network, February, 2021
      - TED Masterclass for Medical Professionals, September, 2019
      - Critical Care Leadership Course, August, 2019
      - Crucial Conversations Course, May, 2019
- 

## CHARITABLE ACTIVITIES

- **Lifesong International, Inc.** - Founder and Medical Director
    - Non-profit charitable organization whose mission is to facilitate the delivery of healthcare services and physical aid to hurting and impoverished people by sending and supporting medical and support personnel to those in need throughout the world
  - **World Link International Ministries, Inc.** - Board Member, Donor
    - Non-profit charitable organization supporting >1500 Indigenous Christian missionaries in over 50 countries
  - Participation with international medical missions trips organized by **Samaritan's Purse, For Hearts and Souls, CURE International, Texas Children's Hospital** and **Memorial Hermann**
- 

## TEACHING ACTIVITIES

- **Didactic Coursework**
  - Courses taught at the current institution:

- Sedation Pharmacologic Review
  - Clinical Pathways for Sedation in the CICU for the Bedside Nurse
  - Clinical Pathways for Sedation in the CICU for the Provider
  - CICU Cardiac Class lectures (Spring and Fall)
    - Sedation practices in the ICU
    - Cardiac Anatomy
  - Biomedical Informatics BMIF 7340; January, 2026
  - Courses taught at other institutions: ARDS, Ethics in Intensive Care
  - **Curriculum Development Work**
    - Achuff BJ, Ettinger NA: Web-based Sedation Learning Module, SBS Nursing Education; accredited by ANCC COA for CNE; Texas Children’s Hospital; November, 2016, update Spring, 2019
    - Achuff BJ: Video; “Sedation in the ICU and validated sedation scoring” Multi-institutional Sponsored by PC4 taskforce
  - **Clinical Teaching**
    - Resident training as dictated in the CICU since 2015, approximately 6 residents per year
    - Fellow Training as dictated in the CICU since 2015, approximately 14 fellows per year
    - Clinical and Research Fellow Mentorship of many specialists between 2015–present
- 

## RESEARCH & GRANTS

### NIH/National Heart, Lung, and Blood Institute

- COMPLETED RESEARCH SUPPORT
  - Title: A COMPARISON OF ANALGESIA AND SEDATION AFTER CARDIAC SURGERY BETWEEN CHILDREN WITH DOWN SYNDROME AND THEIR NON-SYNDROMIC COUNTERPARTS
  - Sponsor: NIH/NATIONAL HEART, LUNG, AND BLOOD INSTITUTE
  - Primary Institution: PEDIATRIC HEART NETWORK
  - Scholar Award \$75,000 from July 1, 2019–July 1, 2023
  - Grant Number: 5U24-HL135691
  - Summary of project:  
 As the primary investigator for this multi-site project, I aimed to prospectively enroll and study the difference in opioid and sedation requirements between pediatric patients undergoing cardiac surgery with Down Syndrome compared to those without the genetic syndrome. Plans included enrollment of two hundred patients including subjects and controls with similar cardiac surgical complexity at Texas Children’s Hospital (Houston), The Children’s Hospital of Philadelphia, C.S. Mott Children’s Hospital (Ann Arbor), and Hospital for Sick Children, Toronto.
- 

## PUBLICATIONS

### Full Papers

- a) Achuff BJ, Nicolson SC, Elci OU, Zuppa AF. Intraoperative dexmedetomidine reduces postoperative mechanical ventilation in infants after open heart surgery. *Pediatr Crit Care Med*. 2015 Jun;16(5):440-7. PMID: 25710463.

- b) Elias MD, Achuff BJ, O'Connor M, et al. Long-term outcomes of pediatric cardiac patients supported by extracorporeal membrane oxygenation. *Pediatr Crit Care Med*. 2017 Aug;18(8):e402-e410. PMID: 28598945.
- c) Achuff BJ, Achuff JC, Moffet B, Rusin CG, Checchia PA. Epinephrine Syringe Exchange Events in a Pediatric Cardiovascular Critical Care Unit: Analyzing the Storm. *Cardiol Young*. 2018 Jun;28(6):835-841. PMID: 29198222.
- d) Achuff BJ, Elias MD, O'Connor M, et al. Risk Factors for Mortality in Pediatric Cardiac Intensive Care Unit Patients Managed with Extracorporeal Membrane Oxygenation: A Contemporary Review. *Cardiol Young*. 2019 Feb;29(2):209-216. PMID: 30378526.
- e) Achuff BJ, Moffett B, Acosta S, Lasa J, Checchia PA, Rusin C. Hypotensive Response to IV Acetaminophen in Pediatric Cardiac Patients. *Pediatr Crit Care Med*. 2019 May;20(5):455-461. PMID: 30676493.
- f) Pollak U, Bronicki RA, Achuff BJ, Checchia PA. Postoperative Pain Management in Pediatric Patients Undergoing Cardiac Surgery: Where Are We Heading? *J Intensive Care Med*. 2021 May;36(4):535-546. PMID: 31446831.
- g) Achuff BJ, Moffett BS, Acosta S, Lasa JJ, Checchia PA, Rusin CG. The authors reply. *Pediatr Crit Care Med*. 2019 Oct;20(10):1004-1005. PMID: 31580284.
- h) Hope KD, Bhat PN, Dreyer WJ, Elias BA, Jump JL, Santucci G, Afonso NS, Ninemire MR, Achuff BJ, Kritz EM, Gowda SH, Puri K. Pediatric Palliative Care in the Heart Failure, Ventricular Assist Device and Transplant Populations: Supporting Patients, Families and Their Clinical Teams. *Children (Basel)*. 2021 Jun 17;8(6):468. PMID: 34199474.
- i) Afonso NS, Ninemire MR, Gowda SH, Jump JL, Lantin-Hermoso RL, Johnson KE, Puri K, Hope KD, Kritz E, Achuff BJ, Gurganious L, Bhat PN. Redefining the Relationship: Palliative Care in Critical Perinatal and Neonatal Cardiac Patients. *Children (Basel)*. 2021 Jul 15;8(7):548. PMID: 34201973.
- j) Savorgnan F, Bhat PN, Checchia PA, Acosta S, Tume SC, Lasa JJ, Asadourian V, Achuff BJ, Flores S, Ahmed M, Crouthamel DI, Loomba RS, Bronicki RA. RBC Transfusion Induced ST Segment Variability Following the Norwood Procedure. *Crit Care Explor*. 2021 May 20;3(5):e0417. PMID: 34036271.
- k) Bronicki RA, Acosta S, Savorgnan F, Flores S, Achuff BJ, Loomba R, Ahmed M, Ghanayem N, Heinle JS, Asadourian V, Lasa JJ. The Acute Impact of Vasopressin on Hemodynamics & Tissue Oxygenation Following the Norwood Procedure. *JTCVS Open*. 2022 Mar 3;9:217-224. PMID: 36004052.
- l) Pande C, Noll L, Afonso N, Serrano F, Monteiro S, Guffey D, Puri K, Achuff BJ, Akcan-Arikan A, Shekerdemian LS. Association of Acute Kidney Injury with Neurodevelopmental Outcomes in Children after Cardiac Surgery. *Ann Thorac Surg*. 2023 Feb;115(2):397-404. PMID: 35346625.
- m) Achuff BJ, Lemmings K, Causey JC, Sembera KA, Checchia PA, Ghanayem NS. Opioid Weaning Protocol Using Morphine vs. Methadone Decreases Duration and Exposure in Patients after Norwood Procedure. *Pediatr Crit Care Med*. 2022 May 1;23(5):361-370. PMID: 34982761.
- n) Pumphrey K, Achuff BJ, Traube C. Sedation Practices in the PICU: An Unexpected Casualty of COVID-19. *Crit Care Explor*. 2022 Jun 1;4(6):e0713. PMID: 35706564.
- o) Smith-Parrish M, Vargas Chaves DP, Taylor K, Achuff BJ, Lasa JJ, Hopper A, Ramamoorthy C. Analgesia, Sedation, and Anesthesia for Neonates with Cardiac Disease. *Pediatrics*. 2022 Nov 1;150(Suppl 2):e2022056415G. PMID: 36317978.
- p) Ettinger NA, Kiskaddon A, McNeely L, Craycraft J, Rogers A, Achuff BJ, Guffey D, Musick M. Retrospective observational study of chloral hydrate use in mechanically-ventilated pediatric intensive care unit (PICU) patients 2012-2017. *Front Pharmacol*. 2023 May 10;14:1164620. PMID: 37214459.
- q) Valentine K, Cisco M, Lasa J, Achuff B, Kudchadkar S, Staveski S. A survey of current practices in sedation, analgesia, withdrawal, and delirium management in paediatric cardiac ICUs. *Cardiol Young*. 2023 Oct;33(10):1314-1319. PMID: 36624726.

- r) Pande CK, Akcan-Arikan A, Monteiro S, Guffey D, Serrano F, Afonso N, Puri K, Achuff BJ, Shekerdemian L, Noll L. Recurrent acute kidney injury is associated with delayed language development in infants with congenital heart disease. *Cardiol Young*. 2024 Oct 10:1-5. [Epub ahead of print]. PMID: 39387244.
- s) Lawson NR, Achuff BJ, Ankola A, Guffey D, Lopez K, Afonso N. Sedation and analgesia doses do not differ across demographic factors in pediatric cardiac surgery patients. *Front Pediatr*. 2025 Jul 16;13:1577461.
- t) Garcia R, DiMaria K, Penk J, Caprarola S, Romer A, Fundora E, Frank D, Achuff BJ. Implementation of a Multiphase, Multi-institutional QI Initiative to Optimize Sedation Practices in CICU Patients. *Cardiol Young*. 2025 Feb; [Manuscript CTY-2024-0575].
- u) Smith TM, Ducatez F, Achuff BJ, Kim FY, Herrup E, Hehir DA, Wolfe HA, Goldberg SA, Jackson S, Yang Y, Lincoln P, Agus MSD, Kheir JN. Adherence to Weaning Opportunities Decreases Length of Stay in Critically Ill Children. [Submitted to *JAMA Pediatrics*, Feb 2026].

### Books

- a) Achuff BJ, Boyer D, Madrigal VA. Calculations. In: Shah SS, Zaoutis LB, Catalozzi M, Frank G, editors. *The Philadelphia Guide: Inpatient Pediatrics*. 2nd ed. New York: McGraw-Hill Education; 2016. p. 34-40.
- b) Achuff BJ, Resheidat A, Quiñónez ZA, Shekerdemian L. Sedation and analgesia in the cardiac ICU. In: Mery CM, editor. *The Texas Children's Hospital Handbook of Congenital Heart Disease*. Houston: Texas Children's Hospital; 2020. p. 349.

### Abstracts

- a) Elias MD, Achuff BJ, O'Connor M, et al. Long-term outcomes of pediatric cardiac patients supported by extracorporeal membrane oxygenation. Poster presentation at: American College of Cardiology (ACC) 65th Annual Scientific Session; 2016 Apr 2-4; Chicago, IL.
- b) Achuff BJ, Achuff JC, Moffet B, Rusin CG, Checchia PA. Epinephrine Syringe Exchange Events in a Pediatric Cardiovascular Critical Care Unit: Analyzing the Storm. Poster presentation at: 7th World Congress on Pediatric Intensive and Critical Care (PICC); 2016 Jun 4-8; Toronto, Canada.
- c) Achuff BJ, Jain P, Moffet B, Williams EA, et al. Applying Business Intelligence Software to Sedation Can Identify Targets for Quality Improvement. STAR award presentation at: Society of Critical Care Medicine (SCCM) 46th Critical Care Congress; 2017 Jan 21-25; Honolulu, HI.
- d) Jain P, Achuff BJ, Checchia PA, et al. Impact of Narcotic Habituation in Neonates undergoing Norwood Procedure. Snapshot presentation at: Society of Critical Care Medicine (SCCM) 46th Critical Care Congress; 2017 Jan 21-25; Honolulu, HI.
- e) Achuff BJ, Jain PN, Moffett B, Checchia PA. Day is not Night: Temporal Variation of Sedation Practice in a Pediatric Cardiac Intensive Care Unit. Snapshot presentation at: Society of Critical Care Medicine (SCCM) 46th Critical Care Congress; 2017 Jan 21-25; Honolulu, HI.
- f) Achuff BJ, Jain PN, Resendiz K, Checchia PA. Do Children with Down Syndrome Really Need Higher Sedation and Analgesia After Cardiac Surgery? Gold Snapshot Award presentation at: Society of Critical Care Medicine (SCCM) 47th Critical Care Congress; 2018 Feb 25-28; San Antonio, TX.
- g) Achuff BJ, Jain P, Resendiz K, Sembera K, Kane, Checchia PA, Williams EA. Objective Sedation Scoring in a Pediatric Cardiac Intensive Care Unit Decreases Narcotic Exposure. Snapshot presentation at: Society of Critical Care Medicine (SCCM) 47th Critical Care Congress; 2018 Feb 25-28; San Antonio, TX.
- h) Achuff BJ, Moffett B, Acosta S, Lasa J, Checchia PA, Rusin C. Hypotensive Response to IV Acetaminophen in Pediatric Cardiac Patients. STAR Award Recognition at: Society of Critical Care Medicine (SCCM) 47th Critical Care Congress; 2018 Feb 25-28; San Antonio, TX.
- i) Resendiz K, Elhoff J, Gagne V, Patel RJ, Moffett BS, Achuff BJ. Evaluation of vasopressin effects on ST-segment variability in critically ill pediatric patients. Poster presentation at: Pediatric Cardiac Intensive Care Society (PCICS) 13th Annual Meeting; 2017 Dec 7-10; Washington, DC.

- j) Gowda S, Jain PN, Checchia PA, Hagan JL, Resendiz K, Achuff BJ. Dexmedetomidine use in Neonates undergoing Norwood Procedure Does Not Limit Narcotic Exposure. Oral presentation award at: NeoHeart: Cardiovascular Management of the Neonate; 2018 Feb 21-24; Dallas, TX.
- k) Gowda S, Jain PN, Checchia PA, Hagan JL, Resendiz K, Achuff BJ. Dexmedetomidine Does Not Decrease Benzodiazepine Exposure for Neonates after Cardiac Surgery. Poster presentation at: NeoHeart: Cardiovascular Management of the Neonate; 2018 Feb 21-24; Dallas, TX.
- l) Resendiz K, Wollam A, Sembera K, Achuff BJ. Opioid and Sedative Use in the ICU during a City-Wide Natural Disaster. Poster presentation at: Pediatric Cardiac Intensive Care Society (PCICS) 14th Annual Meeting; 2018 Dec 13-16; Miami, FL; and SCCM 48th Critical Care Congress; 2019 Feb 17-20; San Diego, CA.
- m) Wollam A, Sembera K, Achuff BJ. Dashboarding sedation medication administrations allows targeted improvement strategies. Oral presentation at: Pediatric Cardiac Intensive Care Society (PCICS) 14th Annual Meeting; 2018 Dec 13-16; Miami, FL.
- n) Sagiv E, Valdés SO, Achuff BJ. IV Sotalol as first line for tachyarrhythmia after Norwood procedure. Oral abstract presentation at: Pediatric Cardiac Intensive Care Society (PCICS) 15th Annual Meeting; 2019 Dec 11-14; London, UK [Note: 2019 Meeting was in London].
- o) Hyatt S, Lam F, Raphael J, Achuff BJ. Opioid Rotation Increase Dose Exposure for Mechanically Ventilated Pediatric Patients. Oral abstract presentation at: 9th World Congress of the World Federation of Pediatric Intensive & Critical Care Societies (WFPICCS); 2022 Jul 12-16; Cape Town, South Africa.
- p) Shalhoub K, Hyatt S, Raphael JL, Guffey D, Achuff BJ. Opioid Rotation in Mechanically Ventilated Children. Orally presented poster at: Pediatric Cardiac Intensive Care Society (PCICS) 18th Annual Meeting; 2022 Dec 15-18; Miami Beach, FL.
- q) Andre JH, Wisniewski MA, Lemming KI, Achuff BJ. Multi-modal Analgesia with Ketorolac after Pediatric Cardiac Surgery Decreases Opioid Exposure. Orally presented poster at: Pediatric Cardiac Intensive Care Society (PCICS) 18th Annual Meeting; 2022 Dec 15-18; Miami Beach, FL.
- r) Achuff BJ. Using Visual Analytics Decision Support to Optimize Quality Sedation Practice in the Cardiac Intensive Care Unit. Top Abstract oral presentation at: Pediatric Cardiac Intensive Care Society (PCICS) 18th Annual Meeting; 2022 Dec 15-18; Miami Beach, FL.
- s) Achuff BJ. The Influence of Pediatric Patient's Social Vulnerability on Sedation Practice and Hospital Length of Stay Following Respiratory Failure. Poster presentation at: 8th World Congress of Pediatric Cardiology and Cardiac Surgery; 2023 Aug 27-Sep 1; Washington, DC.
- t) DiMaria K, Penk J, Caprarola S, Achuff BJ. Implementation of a Multiphase, Multi-institutional QI Initiative to Decrease Opioid and Benzodiazepine Exposure in CICU Patients. Poster presentation at: 8th World Congress of Pediatric Cardiology and Cardiac Surgery; 2023 Aug 27-Sep 1; Washington, DC.
- u) Lawson N, Achuff B, Ankola A, Afonso N. Protocolized Sedation Eliminates Disparities in Post-Operative Pain Control. Presented at: Pediatric Academic Societies (PAS) 2024 Meeting; 2024 May 2-6; Toronto, Canada.
- v) Laws J, Gauher F, Giuse D, Rusin C, Patel N, Kelly P, Achuff B, Patel MB, Wolf M, Maiga A. Patterns of Intracranial Hypertension in Diffuse Axonal Injury. Presented at: Neurocritical Care Society 22nd Annual Meeting; 2024 Oct 14-17; San Diego, CA.
- w) Smith T, Achuff BJ, Kheir J. Adherence to Sedative Weaning Recommendations is Associated with Decreased ICU Length of Stay. Accepted for: Pediatric Academic Societies (PAS) 2025 Meeting; 2025 Apr 24-28; Honolulu, HI.

#### **Other works**

- a) Achuff BJ, Ettinger NA. Web-based Sedation Learning Module [Internet]. Houston: Texas Children's Hospital; 2016 Nov (Updated 2019). Accredited by ANCC COA for CNE.

## **Innovation and Commercialization**

- a) Sedation Pocket Reference Card [Protocol/Clinical Tool]. Houston: Baylor College of Medicine; 2019 Oct. Copyright.
  - (1) Weight and age Based Analgo-Sedation Initiation and Maintenance Protocols for Patients supported with Mechanical Ventilation in the Cardiac ICU.
  - (2) Withdrawal Prevention Protocol for Patients in the Cardiac ICU.
  - (3) Delirium Prevention and Treatment Protocol for Patients in the Cardiac ICU.

## **Invited Lectures, Presentations, and Seminars**

### **International**

- a) Achuff BJ. Sedation Challenges in the Intensive Care Unit. Invited speaker at: World Federation of Pediatric Intensive & Critical Care Societies (WFPICCS); 2020 Dec; Virtual.
- b) Achuff BJ. Saving Baby Brains with Sedation Management Analytics and Leveraging Visual Analytics for COVID and Beyond. Invited speaker at: Health Care Data Matters Webinar; 2021 Feb; Virtual.
- c) Achuff BJ. The Evolution of Virtual Critical Care and Remote Monitoring in a Post Pandemic Era: How Healthcare Leaders are Impacting the Bottom Line and Creating a New Standard of Data-Driven Care. Panelist at: World Congress and Validation Institute; 2021 Jun 14; Virtual.
- d) Achuff BJ. Sedation Challenges in the ICU (Retos de la sedación en Terapia Intensiva Pediátrica). Invited speaker at: Texas Children's Heart Center International Invited Webinar Series; 2021 Jul 7; Houston, TX.
- e) Achuff BJ. Sedation Challenges in the Intensive Care Unit. Grand Rounds at: U.O.C. Terapia Intensiva Neonatale e Pediatrica, Dipartimento Integrato Alta Intensità di Cure e Mamma-bambino; 2021 Mar; Genova, Italy (Delivered virtually).
- f) Achuff BJ. Visualizing Brighter Outcomes for Children with Critical Illness. Podium abstract presentation at: AMIA Informatics Summit; 2023 Mar; Seattle, WA.
- g) Achuff BJ. Epinephrine syringe exchange events in a pediatric cardiovascular ICU: analyzing the storm. Invited speaker at: 8th World Congress of Pediatric Cardiology and Cardiac Surgery; 2023 Sep; Washington, DC.
- h) Achuff BJ. Building a Toolbox for Pain Management in the ICU. Invited speaker at: 8th World Congress of Pediatric Cardiology and Cardiac Surgery; 2023 Sep; Washington, DC.
- i) Achuff BJ. Sedation Stewardship QA in the PCICU. Invited speaker at: Inaugural QI Grand Rounds, Pediatric Cardiac Intensive Care Society (PCICS); 2025 Apr 22; Virtual.

### **National**

- a) Achuff BJ. Visual Analytics to Optimize Sedation and Pain Management for Critically Ill Children at Texas Children's Hospital. Presenter at: Tableau Software Webinar; 2016 Dec; Virtual.
- b) Achuff BJ. Empowering a Cardiovascular Physician with Visual Analytics to Optimize Pain Management and Sedation at Texas Children's Hospital. Invited speaker at: Tableau Conference 2017; 2017 Oct; Las Vegas, NV.
- c) Achuff BJ. Prepared for COVID Safely and Together using Visual Analytics. Presenter at: Prominence Consulting Webinar; 2020 Oct; Virtual.
- d) Achuff BJ. Saving Baby Brains with Sedation Management Analytics. Presenter at: Mending Little Hearts Conference Webinar; 2020 Dec; Virtual.
- e) Achuff BJ. Saving Baby Brains through Sedation Management Analytics and Leveraging Visual Analytics for COVID and Beyond. Presenter at: Healthcare Data Matters Webinar; 2021 Feb 2; Virtual.

- f) Achuff BJ. Using Visual Analytics to Optimize Quality Sedation Practice in the Cardiac Intensive Care Unit. Invited speaker at: Pain Medicine Grand Rounds, Children's Hospital of Los Angeles, Department of Anesthesiology and Critical Care Medicine; 2022 Jun 15; Los Angeles, CA.
- g) Achuff BJ. Using Big Data to Improve Outcomes in the Cardiac Intensive Care Unit. Presenter at: CHOP Cardiology Conference; 2022 Sep; Huntington Beach, CA.

### **Regional**

- a) Achuff BJ. Using Analytics to Optimize Pain Management and Sedation at Texas Children's Hospital. Invited speaker at: Analytics Day at ExxonMobil; 2017 Dec; Houston, TX.
  - b) Achuff BJ. Analytics Optimize Patient Care at Texas Children's Hospital. Inaugural Keynote Speaker at: Houston Healthcare Tableau Users Group, MD Anderson Hospital; 2018 Jul; Houston, TX.
  - c) Achuff BJ. Empowering Providers with Visual Analytics to Optimize Quality Sedation Practice in the Cardiac Intensive Care Unit. Grand Rounds at: Texas Children's Hospital Department of Pediatrics; 2020 Jun 26; Houston, TX.
  - d) Achuff BJ. Who Determines Quality of Life? - Challenges with Navigating Desires of Parents and Medical Teams. Panelist at: Palliative Care Education Rounds - Respite Rounds; 2021 Feb 9; Houston, TX.
- 

***This document is not a retention agreement. A retention agreement is always required in order to be retained.***