Anesthesiology Residency

Welcome to the University of Tennessee!

During your interview, several questions will arise about our residency. This brochure will serve as a guide and information source for some of the 'facts and figures' about our training program. Please feel free to ask any questions that you may have. Some of these topics will be discussed at length during lunch with the Chairman of the Department of Anesthesiology, Dr. Jerry L. Epps, MD.

Interview Schedule

Dinner with the Residents	
Arrival and Introduction	0730
Interview	0800
Interview	0830
Interview	0900
Interview	0930
Interview	1000
Interview	1030
Tour	1100
Lunch with the Chairman	1130
End	1300

Educational Philosophy

One of the outstanding areas of our residency has been the excellent didactic and clinical teaching our trainees receive (see page 2). However, our didactic efforts are predicated on the assumption that postgraduate medical education is ultimately the responsibility of each individual resident. To be successful in the anesthesiology residency at the University of Tennessee, our average resident must commit to read about one hour per day and actively participate in our educational activities.

Measures of Academic Performance

- Anesthesiology Residency Review Committee/ACGME Review Cycle: **5-year accreditation**
- First Time 5-Year Passage Rate for Part 1 of the American Board of Anesthesiology Certification Examination Process: **94%**
- First Time 5-Year Passage Rate for Part 2 of the American Board of Anesthesiology Certification Examination Process: **92%**

Didactic Program

For over twenty years, our program has customized the educational programs for our residents to fit the needs for each year of training. For example, our lecture series is specific for the year of training. With the "splitting" of Part I American Board of Anesthesiologists Certification Examination into Basic and Advanced sections starting with the physicians who matched into anesthesiology residencies in 2013, our educational program is ideally situated to assist our residents in achieving successful passage of this new milestone. The following schedule demonstrates the expected educational opportunities:

Monday (0600 - 0645)

- CA-1 Lecture Series Based Upon Basic Principles of Anesthesiology
- CA-2 Lecture Series Based Upon Advanced Principles of Anesthesiology
- CA-3 Lecture Series
  - ◊ CA-3 residents attend either the CA-1 or CA-2 Lectures for review **UNLESS** the individual resident's score on the preceding ABA/ASA In-Training Examination indicates successful passage of the Part 1 Examination
  - ◊ If a "passing" score is obtained, the CA-3 resident is excused from attendance of the lectures
  - ◊ 2011-2012: six of seven CA-3 residents were excused from attendance
  - ◊ 2012 – 2013: five of seven CA-3 residents will be excused from attendance

Tuesday (0600 – 0645)

- Mock Oral Examinations (three times per month)
- Practice-Based Learning (one time per month)

Wednesday (0630 – 0730)

- Grand Rounds
  - ◊ Invited Guest Speakers
  - ◊ Root Cause Analysis
  - ◊ Case Conference

Thursday (0600 – 0645)

- Part 1 Board Review
  - ◊ Preparatory examinations and discussions for Part 1 of the ABA Certification Examination

Friday (0615 – 0645)

- Morning Report
  - ◊ Case discussion to develop the oral presentation skills needed for Part 2 of the ABA Certification Examination
- CA-1 Introductory Reading Program (July – September)
- CA-3 Introduction to the Business of Anesthesiology Seminar Series

PGY-1 Year

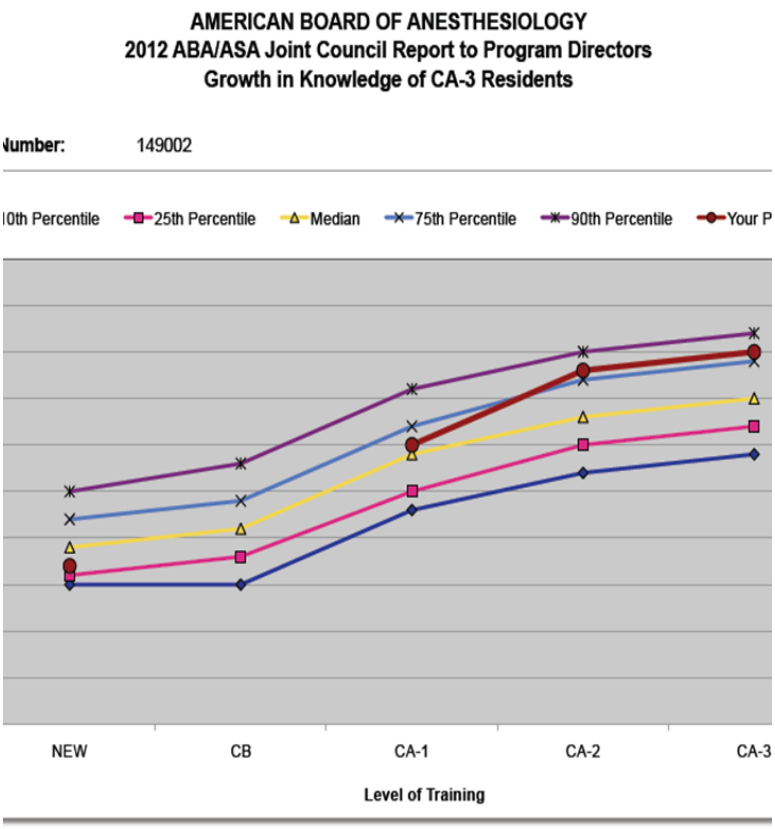
In 2012, the residency program switched to a formal categorical designation. One misconception about our residency in the past has been that the residency was strictly an "Advanced" program. Our training program has been a 'functional categorical' program for over ten years. In other words, a resident applicant who matched with us would complete all four years of training at UTMCK to include the PGY-1 year if so desired

SRNA-Resident Interactions

An area of concern of resident applicants has been the possibility of competition for cases between our residents and the student nurse anesthetists who train at the University of Tennessee Medical Center. Assignment of cases is simple at our institution. Residents are assigned first, then SRNAS second and the remainder of cases assigned to CRNAS. Residents are the primary providers for @ 25% of our cases. As a result, resident assignments are based upon the best educational experience and not service requirements which are provided by nurse anesthetists. Camaraderie in the department between the residents, faculty, student nurse anesthetists and certified nurse anesthetists is superb and makes for an excellent working environment.

Resident Performance on Standardized Tests

As a result of the quality of our residents and the efforts of our training program, resident performance on standardized tests has been superb. The accompanying chart is just one example of the consistent performance of our trainees.



Other Residency Facts

- Most residents obtain the ABA/ACGME minimums in all categories by the end of the CA-2 year
- Case logs approach or exceed the national averages in all categories by graduation
- The most recent change to our rotation schedule is a CA-3 elective in hepatic transplantation
- The only mandatory "away" rotation is two months of pediatric anesthesia at Children's Hospital at Vanderbilt University
- The geographic area for resident recruitment is from across the USA with a predominance in the Southeast but increasing representation from the Midwest
- One to three residents per year pursue fellowship training upon graduation
- "Moonlighting" on Sunday in the Department of Anesthesiology is available for interested residents but strictly optional

Faculty

Longevity

A unique aspect of the residency program at the University of Tennessee is the lack of "turnover" in faculty at an academic medical center. For the past twenty-five years, only two faculty members have left to practice anesthesiology at another institution. The reasons for this consistency are myriad. The unique aspect of the combination of private practice and academia in the Department of Anesthesiology is common throughout the medical center. The beautiful scenery of east Tennessee coupled with the love of outdoor activities and college athletics are temptations that some individuals cannot resist.

Specialization & Composition

As our medical center has grown over the past twenty-five years, the expansion of our department has increased from eleven to twenty-seven faculty members. Due to the lure of our practice advantages, twenty-four of our twenty-seven faculty completed their residency at the University of Tennessee. The vast majorities of our former residents are fellowship-trained and bring the expertise from other institutions to insure a vast breadth of techniques and approaches to anesthetic management. Subspecialty training of our faculty include all aspects of anesthesia care to include Neuroanesthesia, Cardiac Anesthesia to include advanced transesophageal echocardiography, Obstetrical Anesthesia, Acute and Chronic Pain, Regional Anesthesia, Critical Care, Palliative Medicine, Pediatric Anesthesia and Neurocritical Care.

Political Activity of the Residents and Faculty

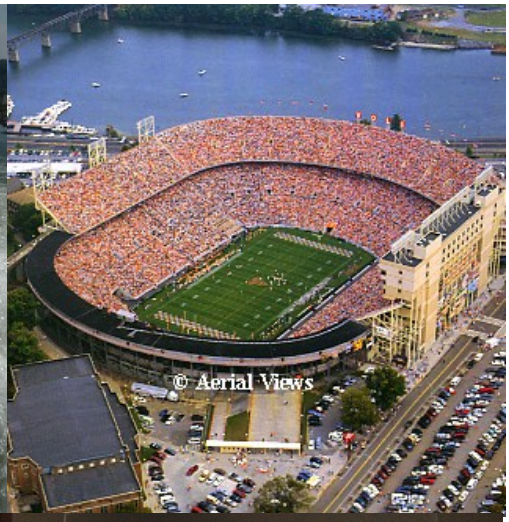
One of the goals of our training program is to produce well-rounded anesthesiologist who understands not only the clinical practice of anesthesiology but the need to raise the profile of anesthesiology within the highly competitive environment of Congressional politics. Each year residents and faculty attend the American Society of Anesthesiologists Legislative Conference in Washington, D.C. The Department of Anesthesiology at the University of Tennessee was the first to have 100% contribution to the ASA Political Action Committee by both faculty and residents. Since our department achieved this feat, only two other departments have ever met this milestone event. In addition, the current president of the Tennessee Society of Anesthesiologists is Daniel Bustamante, MD, Assistant Professor of Anesthesiology at the University of Tennessee Medical Center at Knoxville. Another member of our faculty, W. Eric Cox, MD, is past-president of the TSA as well.

Vacation/Sick Leave/Maternity Leave/Educational Leave

- The American Board of Anesthesiology requirements regarding days absent from residency training each calendar year are clear-cut. A resident cannot miss more than twenty-days each calendar year. If more than a twenty day absence per academic year occurs, then the residency must be extended.
- Most institutions permit three weeks of vacation and five days of sick-time. If a resident in the Department of Anesthesiology at UTMCK does not use "sick" time, then all twenty days can be used for vacation.
- In contrast to many other programs, individual days of vacation may be scheduled as opposed to one-week blocks. This enables our residents to combine vacation days with the call schedule to create longer breaks without necessarily using up vacation days.
- Female residents may "bank" vacation days **if so desired** for absences due to pregnancy and child-birth.
- Each year every resident is allowed five days for educational leave to attend an anesthesiology conference with financial support based upon level of training ($1500 PGY-2, $1750 PGY-3 & $2000 PGY-4). Residents who present scholarly activity at state, regional or national meetings also receive financial support from the Graduate School of Medicine to present their work ($2250). Educational leave for conference attendance or scholarly activity presentation does not constitute absence from training and thus does not 'count' toward the twenty days limit.

Camaraderie at the University of Tennessee Medical Center

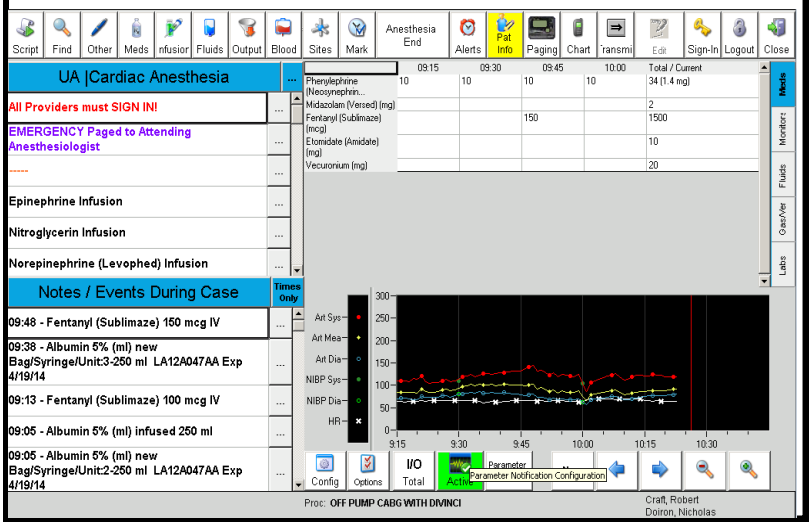
The same reasons which attracted residents to east Tennessee appeal greatly to the faculty in the Department of Anesthesiology. As a result, the '*esprit de corps*' among all members is excellent and social interactions between our residents, faculty, SRNAS, CRNAS and surgeon are common place. A better working environment within our operating rooms is hard to envision.

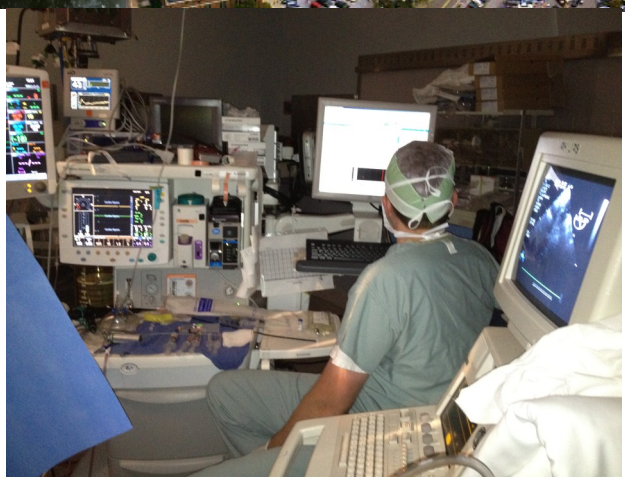


The "Electronic Age" and the Anesthesiology Residency

Recognizing the costs of our major anesthesiology texts, our department has provided an initial anesthesiology 'library' for each resident which consisted of nine separate texts to include: Principles and Practice of Anesthesiology, A Practice of Anesthesia for Infants and Children, Anesthesia and Co-Existing Disease, Basics of Anesthesia, Cardiac Anesthesia. Faust Review Book, Fundamentals of Critical Care Manual, Obstetric Anesthesia - Principles and Practice & Pharmacology and Physiology. With input from our residents, we have transitioned from "bound paper copies" to the electronic versions of these texts to be used with an iPad which is also purchased for each resident by our department.

In February 2009, our department installed Centricity Perioperative Anesthesia information system with monitor capture and superb ease of documentation. This electronic anesthesia record allows our caregivers to concentrate on patient care as opposed to documentation in our operating rooms and delivery suites.





Departmental Leadership

Robert Craft, MD (far left) is the Residency Program Director and Vice-Chairman. The Chairman of the Department of Anesthesiology, Jerry Epps, MD, (far right) assumed that role in 2004 after serving as Vice-Chairman and Program Director for many years. In addition, Dr. Epps serves as Chief Manager for University Anesthesiologists. The Chief Manager of University Anesthesiologists has been the Chairman of the Department of Anesthesiology for over 50 years. This leadership succession plan is expected to continue for the foreseeable future.

Presentations and Abstracts

While the clinical and didactic strength of our program has been objectively evident for more than two decades, our department has made a concerted effort over the last 8 years to increase the quantity and quality of our scholarly activity, through the development of a mentorship program and multiple areas of active, ongoing investigation.

Scholarly Activity Academic Year 2011 - 2012 (Resident Names in Bold; Faculty Underlined)

Publications

- "A Peri-Operative Device Management Algorithm for Cardiac Implantable Electronic Devices: the PACED-OP Protocol" William Jeremy Mahlow, MD; Robert M. Craft, MD; **Nicholas L. Misulia, MD**; James W. Cox, Jr., MD; Jeffrey B. Hirsh, MD; Carolyn C. Snider, MT; Jerrin O. Nabers; Zachary A. Dickson; Dale C. Wortham, MD; Pacing and Electrophysiology Journal (In Press)

Chapters

- In press: *Faust's Anesthesiology Review*; Murray et al
  - ◊ Central Regulation of Ventilation – Michael Hosking, MD-
  - ◊ Retrobulbar Blocks – Michael Hosking, MD
  - ◊ Anesthesia for the Sitting Position – Robert Craft, MD; Daniel Bustamante, MD
  - ◊ Type, Screen and Cross-match – J. L. Epps, MD; Robert Craft, MD
  - ◊ Evaluation of the Coagulation System – Craig Combs, MD.: Robert Craft, MD
  - ◊ Non-Infectious Transfusion Complications – Kip Robinson, MD; Robert Craft, MD
- In Editing: *Clinical Anesthesiology*;
  - ◊ Renal Anatomy and Physiology – Robert Craft, MD: Kip Robinson, MD
  - ◊ Anesthesia and Renal Disease – Patrick McConville, MD; Robert Craft, MD
  - ◊ Acid Base Balance – Patrick McConville, MD; Robert Craft, MD
  - ◊ Perioperative fluid Management – Kip Robinson, MD; Robert Craft, MD
  - ◊ Anesthesia for Genitourinary Surgery – Kip Robinson, MD; Robert Craft, MD
  - ◊ Fluid Compartments and Electrolytes – Daniel Bustamante, MD; Robert Craft, MD;

Presentations and Abstracts

- American Society of Anesthesiologists Annual Meeting October 2011
  - ◊ "Anesthetic Considerations in a Patient with Brugada Syndrome"; Steven Strevels, M.D.
  - ◊ "Management of Unanticipated Airway Obstruction During Bronchoscopy"; Stephen Patteson M.D., Brigitte Messenger M.D.,
  - ◊ **Nicholas Doiron M.D.**
  - ◊ "Bioimpedance for Identification of the Epidural Space"; Stephen K. Patteson, M.D., **Lally Lehmann, M.D., Christal Greene, M.D., Jeff Ollis, M.D.**
  - ◊ "Common Variable Immunodeficiency Disorder in a Trauma Patient requiring Massive Transfusion"; **Christal Greene, M.D.,** Daniel Bustamante, MD
- Society for Technology in Anesthesia
  - ◊ "Bioimpedance For Identification Of The Epidural Space"; Stephen K. Patteson, M.D. and **Christal L. Greene, M.D.**
- 2012 International Anesthesia Research Society
  - ◊ "Preoperative Antihypertensive Therapy Effect Upon Intraoperative Systolic Blood Pressure Variability "; **Jason Buehler MD,** Robert Craft MD, Roger Carroll PhD, Carolyn Snider MT (ASCP), Zack Dickson, Taylor Buck
  - ◊ "Exposure Of Tg2576 Mice To Isoflurane Results In No Detectable Increase In Aβ Amyloid Load Via [18f]Av45 Pet Imaging Con firmed With Autoradiographic Investigation"; **Cody Rowan, MD**; Stephen Kennel PhD; Robert Craft, MD; Jonathan Wall, PhD; Emily Martin, BS
  - ◊ "Perioperative Management Of Patient With Hereditary Angioedema For Wisdom Teeth Extraction"; **Nicholas Doiron, MD**; Eric Cox, MD
  - ◊ "Intrauterine Fetal Ketamine for Immobility during Cordocentesis"; Stephen K. Patteson, M.D., **Mary Ellen Graham, M.D.**
- Society of Obstetrics, Anesthesiology and Perinatology 2012
  - ◊ "Refractory Postpartum hemorrhage in a Jehovah's Witness"; **Jason M. Buehler, MD**; Daniel Bustamante, MD; Patrick McConville, MD; J. Doug Keller, DO.
- Tennessee Society of Anesthesiologists February 2012
  - ◊ "Does A Consensus Exist In The Evaluation And Treatment Of Perioperative Corneal Abrasions? A Survey Of American Anesthesia ology Residency Programs"; **S. Timothy McIlrath, MD; Jeffery A. Ollis, MD**; Daniel R. Bustamante, MD
  - ◊ "Integration Of Evidence-Based Checklists For Operating Room Crisis Management Into An Electronic Medical Record"; **Cody Rowan, MD**; Jerry Epps, MD; Kip Robinson, MD
  - ◊ "Pharyngeal Soft Tissue Injury during Videolaryngoscopy"; **Zachary D. Lazarus, MD**, Daniel R. Bustamante, MD, **Jeffery A. Ollis, MD**
  - ◊ "A Difficult Airway in a Patient With Moebius Syndrome and Gingival Hyperplasia"; **Matthew Kimball, MD;** Robert Craft, MD
  - ◊ "Critical Intrathoracic Tracheal Stenosis Treated by Vascular Balloon Dilation"; **L. Matthew Pittman, MD; Wayne Smith, MD**., Robert Craft, MD