

Division of Department Of Anesthesia

DIVISION PROFILE	
Number of Faculty	38
Number of Joint Appointment Faculty	3
Number of Fellows	
Clinical Fellows	9
Number of Graduate Students	1
Number of Other Students (full and part-time)	2
Number of Support Personnel	101
Annual Total Grant Support (direct)	\$50,000
Number of Peer Reviewed Publications	17
Patient Encounters	
Outpatient	12,160
Inpatient	26,867

FACULTY LISTING

Charles Dean Kurth, MD, Professor of Anesthesia and Pediatrics, Anesthesiologist-in-Chief; Chair, Department of Anesthesiology

Elena Adler, MD, Adjunct Associate Professor of Clinical Anesthesia and Pediatrics, Anesthesia Supply Chain Medical Director

Nancy P. Andersen, MD, Adjunct Associate Professor of Clinical Anesthesia and Pediatrics

Lori Aronson, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

Mary Brown, MD, Adjunct Associate Professor of Clinical Anesthesia and Pediatrics

Yvon Bryan, MD, Associate Professor of Clinical Anesthesia and Pediatrics

Steven Danzer, PhD, Assistant Professor of Anesthesia and Pediatrics

Viola Devany, MD, Associate Professor of Clinical Anesthesia and Pediatrics

Jasleen Goel, MD, Assistant Professor of Clinical Anesthesiology

Kenneth R. Goldschneider, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Director, Division of Pain Management

Joel Gunter, MD, Associate Professor of Clinical Anesthesia and Pediatrics

Elizabeth Hein, MD, Adjunct Assistant Professor of Clinical Anesthesia and Pediatrics, Co-Medical Director of Same Day Surgery and Pre-Anesthesia Consult Clinic

Clifford Hoffmann, MD, Associate Professor of Clinical Anesthesia

Liana Hosu, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

Susan Hussein, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

Thomas Kabalin, MD, Associate Professor of Clinical Anesthesia and Pediatrics

Michael "Jack" Kibelbek, MD, Associate Professor of Clinical Anesthesia and Pediatrics

Matthias Konig, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

Ik Sung Lee, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Clinical Director, Division of Anesthesia

Andreas W. Loepke, MD, PhD, Assistant Professor of Clinical Anesthesia and Pediatrics

Mohamed Mahmoud, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

John J. McAuliffe, III, MD, MBA, Associate Professor of Clinical Anesthesia and Pediatrics, Director of Research, Department of Anesthesiology

Mark Meyer, MD, Assistant Professor of Clinical Anesthesia and Pediatrics, Director of Procedure Management, Division Pain Management

Jacquelyn Morillo-Delerme, MD, Assistant Professor of Clinical Anesthesia and Pediatrics, Transplant Anesthesia Program Director, Division of Anesthesia

Joseph Previte, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Director Information Technology Services

Marnie Robinson, MD, Assistant Professor of Clinical Anesthesia and Pediatrics, Fetal Surgery Anesthesia Program Director, Division of Anesthesia

Senthilkumar Sadhasivam, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

Paul Samuels, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Director of Education,
 Department of Anesthesiology
 Michael Shackelford, MD, Assistant Professor of Clinical Anesthesia and Pediatrics
 Ximena Soler, MD, Assistant Professor of Clinical Anesthesia and Pediatrics
 James Spaeth, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Director Cardiac
 Anesthesia, Division of Anesthesia
 Theodore W. Striker, MD, Professor of Anesthesia and Pediatrics, Director of Outpatient Mason, Division
 of Anesthesia
 Alexandra Szabova, MD, Assistant Professor of Clinical Anesthesia and Pediatrics
 Anna M. Varughese, MD, MPH, Associate Professor of Clinical Anesthesia and Pediatrics, Associate
 Director, Department of Anesthesiology
 Anne Waters, MD, Assistant Professor of Clinical Anesthesia and Pediatrics
 Norbert J. Weidner, MD, Associate Professor of Clinical Anesthesia, Director Palliative Care, Division of
 Pain Management
 Eric Wittkugel, MD, Associate Professor of Clinical Anesthesia and Pediatrics, Co-Medical Director, Same
 Day Surgery and Pre-Anesthesia Consult Clinic
 Junzheng Wu, MD, Assistant Professor of Clinical Anesthesia and Pediatrics

FACULTY JOINT APPOINTMENT LISTING

Jasleen Goel, MD, Assistant Professor of Anesthesia, Radiology
 Todd Nick, PhD, Assistant Professor of Anesthesia, Biostatistics and Epidemiology
 Susmita Kashikar-Zuck, PhD, Associate Professor of Anesthesia, Psychology

OVERVIEW



Left to Right: (1st row) S. Barclay, J. Previte, M. Bryant, E. Adler, L. Aronson, C. D. Kurth, C. Opdycke, M. Soberano, L. Hosu, A. Varughese (2nd row) R. Blacklidge, X. Soler, A. Boat-Waters, S. Sadhasivam, M. Mahmoud, P. Samuels, J. McAuliffe, M. Meter, A. Tucker, M. Cohen (3rd row) N. Weidner, J. Spaeth, K. Brennen, N. Andersen, I. Lee, J. Wu, A. Wilborn, C. Hoffman, (4th row) J. Tomasson, J. Gunter, K. Goldschneider, S. Hussein, M. Baker, J. Furstein, K. Lantz

From the fetus to young adult, we provide anesthesia, sedation, life-support, organ protection, and pain management for surgery, radiology, and other medical procedures, as well as management of chronic pain unrelated to surgery. The department is internationally recognized in anesthesia for fetal surgery, cardiac

surgery, bariatric surgery, neuroradiology, difficult airway problems, and in management of acute and chronic pain conditions.

The department includes the Division of Anesthesia, Division of Pain Management, and the Division of Neurobiology. In the Anesthesia Division, the sections consist of cardiac, fetal, transplant, same-day-surgery/preanesthesia clinic, and supply-chain management. In the Pain Management Division, there are the sections of acute pain service, chronic pain clinic, procedure management, and palliative care. In the Neurobiology Division, there are sections for neurological monitoring and imaging radiology.

Our vision is to innovate, deliver, and lead the practice of pediatric anesthesia, pain management, and neurobiology. Our mission is to innovate and deliver high quality, cost effective anesthesia care, pain management and neurological monitoring; to educate our faculty, trainees, and co-workers of our innovations and services; to create rewarding careers for our staff; and to develop leadership in the field of pediatric anesthesia, pain management, and neurobiology.

Our education program includes clinical and research fellowships, as well as special rotation experiences. For clinical fellowships, we offer a one year pediatric anesthesia fellowship, a 20 month combined pediatric anesthesia and pain management fellowship, and three month "mini-fellowships" in pediatric cardiac anesthesia, neuromonitoring, and pain management. There are one-month rotations in pediatric anesthesia for anesthesia residents and student nurse anesthetists from the University of Cincinnati, one-month rotations for pediatric residents and critical care fellows in airway skills, and 6 to 12 week "update" rotations in pediatric anesthesia and pain management for practicing anesthesiologists from around the world. We offer a one or two year research fellowship in clinical investigation of pediatric anesthesia outcomes and in basic neurobiology of neuronal injury and neuroplasticity.

The department's research engine is The Institute of Pediatric Anesthesia (IPA). The IPA studies developmental neurobiology, performs clinical trials, and conducts health service analyses to improve the quality and effectiveness of pediatric anesthesia, sedation, neuromonitoring, and pain management. The IPA has strategic alliances with the divisions of Developmental Biology, Epidemiology and Biostatistics, and Clinical Effectiveness.

HIGHLIGHTS

The department had an outstanding year in many respects. Once again, we set records for number of anesthetics administered as well as number of pain management consultations and neurological monitoring procedures. The department also exceeded last year's high for number of research presentations, national speaking engagements, publications, and research grants. At the same time, the department received the five star service award for quality in anesthesia and pain management care, ranking us in the top 10% of departments nationally. Noteworthy, our efforts decreased surgical site infections by 3-fold and improved postoperative comfort in the PACU by 2-fold.

This year showed continued growth in high acuity, medically complex patients undergoing longer, specialized surgery, as well as growth in patients with painful medical conditions and undergoing specialized radiological tests. The department opened 2.5 operating rooms per day for surgery, as well as procedure slots for radiology and oncology in their locations. In the Anesthesia division, yearly surgical cases and hours increased 3% and 16% respectively, compared with last year. In the Pain Management division, procedure cases and acute consults increased 146% and 8% over last year, reflecting the increase in oncology and complex surgery, respectively. In the Neurobiology division, neuromonitoring, anesthesia cases, and consults increased 15%, 30%, and 100%, respectively, compared with last year.

We recruited 4 anesthesiologists, 1 anesthesia-pain management physician, 4 certified nurse anesthetists, 2 nurse practitioners, 1 neurobiologist, and acquired the sedation section in the Department of Radiology, which included 20 nurses and one pediatrician. All 5 physicians recruited were fellowship trained pediatric anesthesiologists. Drs. Mahmoud, Shackleford, and Hosu came directly from their fellowship at Cincinnati Children's. Drs. Kibelbeck and Soler came from Dayton Children's and UCLA after completing fellowships a few years ago at Children's Hospital of Philadelphia and Cincinnati Children's, respectively. Dr. Hosu

practiced both pediatric anesthesia and pain management. Dr. Danzer came from Duke University as a neurobiology scientist with expertise in neural networking, neurogenesis, and epilepsy.

Many faculty contributed to our service and academic achievements. Seventeen faculty authored all 12 articles in the journal International Anesthesia Clinics describing the frontiers of pediatric anesthesia and pain management. Drs. Aronson, McAuliffe, and Spaeth spoke at a national meeting on coagulation disorders, brain injury, and neurological outcomes. Drs. Meyer, Goldschneider, and Weidner spoke at the International Pediatric Pain Meeting on a new pain care paradigm for hematology-oncology. Dr. Weider received Humanitarian of the Year award at Cincinnati Children's and spoke to the state government on pediatric palliative care. Dr. Gunter spoke about safety at the Society of Pediatric Anesthesia. Drs. Samuels, Previte, and Robinson conducted a workshop on pediatric fiberoptic intubation at the annual Ohio Society of Anesthesiologists. Drs. Loepke, Samuels, and Bryan were visiting professors at the University of Pennsylvania, Columbia University and University of Barcelona, Spain. Dr. Danzer received grants from the Epilepsy Foundation and the Trustee Foundation. Dr. Kurth edited a journal edition International Anesthesia Clinics and spoke on neurological monitoring at the Society of Pediatric Anesthesia.

The Department had 6 fellows in the pediatric anesthesia program and 1 fellow in the combined pediatric anesthesia-pain management program. Four fellows presented abstracts at the Midwest Anesthesia Residents Conference and the Society of Pediatric Anesthesia. This year we recruited 8 residents to next year's fellowship program from Cleveland Clinic, West Virginia University, Med College Ohio, University of Wisconsin, and University of Cincinnati.

Investigators in the Institute of Pediatric Anesthesia presented over 15 abstracts at national meetings of the International Anesthesia Research Society, Society of Pediatric Anesthesia, Neuroscience, and American Society of Anesthesiologists. Drs. Loepke and McAuliffe delivered abstracts concerning mechanisms of hypoxic brain injury in neonates. Dr. Danzer presented abstracts at the Neuroscience meeting on hippocampal rewiring with epilepsy. Drs. Sadhasivam, Gunter, Robinson, and Varughese presented abstracts on postanesthetic outcomes, fetal surgery, and pre-anesthetic care.

TRAINING

Pamela Bland, MD	Fellow	Medical University of OH
Todd Brown, MD	Fellow	Cleveland Clinic
Jason Daume, MD	Fellow	Ohio State University/West Virginia University
Nancy Hagerman, MD	Fellow	The John Hopkins Hospital
George Istaphanous, MD	Fellow	Washington Hospital Center/Univ of Cincinnati College of Medicine
Fay Jou, MD	Fellow	UT Health Science Center/University of NM Health Science Center
Steven Samoya, MD	Fellow	University Hospital-Cleveland
Jon Tomasson, MD	Fellow	University of Wisconsin Hospital & Clinics
Amy Wilborn, MD	Fellow	CCHMC/VCU College of Medicine

GRANTS, CONTRACTS AND INDUSTRY AGREEMENTS

Grant and Contract Awards	Annual Direct/Project Period Direct
Danzer, S	
Contributors of Age and Experience to the Epileptogenic Transformation of Granule Cells	
Epilepsy Foundation	
	01/01/06 – 12/31/07
	\$50,000/\$100,000
	Current Year Direct
	\$50,000

Industry Contracts

Current Year Direct Receipts \$0

TOTAL \$50,000

PUBLICATIONS

1. Adler E. Anesthesia supply chain. *Int Anesthesiol Clin* 2006;44(1):159-77.
2. Aronson LA, Spaeth JP. Frontiers in pediatric anesthesia: cardiac anesthesia. *Int Anesthesiol Clin* 2006;44(1):33-49.
3. Bryan YF, Templeton TW, Nick TG, Szafran M, Tung A. Brain magnetic resonance imaging increases core body temperature in sedated children. *Anesth Analg* 2006;102(6):1674-9.
4. Taghon TA, Bryan YF, Kurth CD. Pediatric radiology sedation and anesthesia. *Int Anesthesiol Clin* 2006;44(1):65-79.
5. Hein EA, Rutter MJ. New perspectives in pediatric airway reconstruction. *Int Anesthesiol Clin* 2006;44(1):51-64.
6. Hussein SA. Anesthesia for pediatric endoscopies. *Int Anesthesiol Clin* 2006;44(1):81-93.
7. Loepke AW, Golden JA, McCann JC, Kurth CD. Injury pattern of the neonatal brain after hypothermic low-flow cardiopulmonary bypass in a piglet model. *Anesth Analg* 2005;101(2):340-8, table of contents.
8. Loepke AW, McCann JC, Kurth CD, McAuliffe JJ. The physiologic effects of isoflurane anesthesia in neonatal mice. *Anesth Analg* 2006;102(1):75-80.
9. Meyer MJ. Integration of pain services into pediatric oncology. *Int Anesthesiol Clin* 2006;44(1):95-107.
10. Previte JP. Information and communication system implementation in anesthesia. *Int Anesthesiol Clin* 2006;44(1):179-97.
11. Robinson MB. Frontiers in fetal surgery anesthesia. *Int Anesthesiol Clin* 2006;44(1):1-15.
12. Samuels PJ. Anesthesia for adolescent bariatric surgery. *Int Anesthesiol Clin* 2006;44(1):17-31.
13. Dent CL, Spaeth JP, Jones BV, Schwartz SM, Glauser TA, Hallinan B, Pearl JM, Khoury PR, Kurth CD. Brain magnetic resonance imaging abnormalities after the Norwood procedure using regional cerebral perfusion. *J Thorac Cardiovasc Surg* 2006;131(1):190-7.
14. Varughese AM, Morillo-Delerme J, Kurth CD. Quality management in the delivery of pediatric anesthesia care. *Int Anesthesiol Clin* 2006;44(1):119-39.
15. Weidner NJ. Developing an interdisciplinary palliative care plan for the patient with muscular dystrophy. *Pediatr Ann* 2005;34(7):546-52.
16. Weidner NJ. The evolution of pediatric palliative medicine and its integration with anesthesia. *Int Anesthesiol Clin* 2006;44(1):109-18.
17. Wittkugel EP, Varughese AM. Pediatric preoperative evaluation--a new paradigm. *Int Anesthesiol Clin* 2006;44(1):141-58.