

Division of Anesthesiology

DIVISION PROFILE

Number of Faculty	29
Number of Fellows	
Clinical Fellows	9
Number of Support Personnel	36
Annual Total Grant Support (direct)	\$80,997
Annual Total Industry Contracts (direct)	\$40,873
Number of Peer Reviewed Publications	2
Patient Encounters	
Outpatient	5,092
Inpatient	21,960

FACULTY LISTING

Charles D. Kurth, MD, Professor of Anesthesia & Pediatrics, Anesthesiologist-in-Chief, IPA Member: Neurobiology Core

Elena Adler, MD, Adjunct Associate Professor, Anesthesia Workroom Supervisor

Nancy Andersen, MD, Adjunct Associate Professor, Cardiac Anesthesia Team Member

Lori Aronson, MD, Assistant Professor, Cardiac Anesthesia Team Member

Richard Berlin, MD, Associate Professor

Mary Brown, MD, Adjunct Associate Professor

Viola Devany, MD, Adjunct Associate Professor

Kenneth Goldschneider, MD, Associate Professor, Director, Division of Pediatric Pain Management, IPA Member: Clinical Trials Core

Joel Gunter, MD, Professor, Cardiac Anesthesia Team Member, IPA Member: Clinical Trials Core

Jean Harrington, MD, Associate Professor

Elizabeth Hein, MD, Adjunct Assistant Professor

Clifford Hoffman, MD, Associate Professor

Susan Hussein, MD, Assistant Professor

Thomas Kabalin, MD, Associate Professor

Ik Sung Lee, MD, Associate Professor, Clinical Director

Andreas Loepke, MD, PhD, Assistant Professor, IPA Member: Neurobiology Core

John McAuliffe, MD, MBA, Associate Professor, Research Director, IPA member: Neurobiology Core

Mark Meyer, MD, Assistant Professor, Pain Management Team Member

Jacquelyn Morillo-Delerme, MD, Associate Professor

Jayant Patkar, MD, Associate Professor

Joseph Previte, MD, Associate Professor

Paul Samuels, MD, Associate Professor, Education Director

James Spaeth, MD, Associate Professor, Cardiac Anesthesia Director, IPA Member: Clinical Trials Core

Theodore W. Striker, MD, Professor

Anna Varughese, MD, Associate Professor, Associate Director, Pain Management Team Member, IPA Member: Health Services Core

Norbert Weidner, MD, Associate Professor, Medical Director, StarShine Hospice, Pain Management Team Member

Eric Wittkugel, MD, Associate Professor, Director Perioperative Services

Betty Worri, MD, Assistant Professor

Junzheng Wu, MD, Assistant Professor

OVERVIEW

From the fetus to young adult, we provide anesthesia care for surgery and other medical procedures, as well as management of chronic pain unrelated to surgery. The division is internationally recognized in anesthesia

for premature infants, pediatric cardiac surgery, outpatient anesthesia, difficult airway problems, and chronic pain conditions.

Our vision is to innovate, deliver, and lead the practice of pediatric anesthesia and pain management. Our mission is to innovate and deliver high quality, cost effective anesthesia care and pain management; 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 and pain management.



Left to Right: (1st row) R. Blacklidge, M. Robinson, J. Previte, J. Beiersdorfer, L. Aronson, N. Andersen, A. Varughese, E. Adler, J. McAuliffe, H. Morrison, I. Lee, (2nd row) T. Striker, M. Soberano, N. Weidner, T. Kabalin, L. Bucca-Cosgrove, K. Hackbarth, J. Spaeth, E. Hein, A. Loepke, S. Hussein, V. Devany, J. Gunter, M. Meyer, K. Goldschneider

Our education program includes a one year pediatric anesthesia fellowship, an 18 month combined pediatric anesthesia and pain management fellowship, 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 6-12 week “update” rotations in pediatric anesthesia and pain management for practicing anesthesiologists from around the world.

The division’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 and pain management. The IPA has strategic alliances with the divisions of Developmental Biology, Epidemiology and Biostatistics, and Clinical Effectiveness.

HIGHLIGHTS

We had an outstanding year. The division set records for number of anesthetics provided for surgery, radiology, cardiology, and hematology-oncology as well as number of pain management consultations. The division also achieved highs for number of research presentations, national speaking engagements, and fellows trained. At the same time, the division received the top rating for quality of anesthesia services among 250 hospitals, a remarkable feat considering the extraordinary growth in service and academic activity.

The increase anesthesia and pain management services resulted from our recruitment of 3 anesthesiologists, 1 anesthesiologist-pain management physician, and 3 certified nurse anesthetists. The division was able to open 2 operating rooms for surgery at main campus, one operating room at the Mason Surgery Center two days per week, one operating room for radiology three days per week, one anesthesia suite for hematology-oncology three days per week, and staff the cardiology suite, representing a 32% increase in capacity.

Compared with last year, the surgical cases at main campus and Mason Surgery Center increased nearly 15% and 10%, respectively, while cases for hematology-oncology, interventional cardiology, and radiology increased 425%, 32%, and 410%, respectively. Pain management and anesthesia consults increased 37% and 430%, respectively, compared with last year.

All four physicians recruited were fellowship trained pediatric anesthesiologists. Dr. Jacqueline Morillo-Delerme came from Children's Hospital Pittsburgh to bolster our operating room management team and link our quality improvement efforts with clinical delivery and education. Dr. Susan Hussein was recruited from the Cleveland Clinic Foundation to help our growing education program. Drs. Mark Meyer and Junzheng Wu joined from our fellowship program and will help with pain management and bolster our neurobiology research program, respectively.

Many faculty contributed to our achievements. Dr. Wittkugel developed a pre-anesthesia consult clinic (PACC) to improve the quality of our pre-operative evaluations. He spoke at the international pediatric endoscopy conference on pre-anesthesia evaluations for pediatric airway surgery. Drs. Loepke and Spaeth were recognized nationally from their publications concerning glucose management and the neonatal brain during heart surgery. They also spoke at the American Society of Anesthesiologists on pediatric cardiac anesthesia. Drs. Junzheng Wu, Joel Gunter, and Joe Previte received national recognition concerning the risk of fire with inhaled anesthesia drugs. Dr. Norbert Weidner received certification in palliative care and will be leading the development of a palliative care program at Children's. Dr. Theodore Striker received the prestigious Robert M. Smith award from the Society of Pediatric Anesthesia for life-time achievement in pediatric anesthesia. Dr. Dean Kurth spoke at the Society of Critical Care Medicine and the Society of Pediatric Anesthesia on Neurological Monitoring and Clinical Implications of the Effects of Anesthetics on the CNS.

The division had 6 fellows in the pediatric anesthesia program. The division also created an educational program for the practicing anesthesiologist seeking to update their training in pediatric anesthesia or pain management. Anesthesiologists from Japan and Oregon participated in this program. Dr. Paul Samuels lead a workshop on pediatric fiberoptic intubation for anesthesiologists from the Midwest region. Anesthesia & Analgesia published a report by Dr. Lori Aronson on pediatric cardiac anesthesia.

Investigators in the Institute of Pediatric Anesthesia made 10 research presentations at national meetings. The focus of the basic science research is the study of molecular substrates learning and behavior in relation to the mechanisms of hypoxic/ischemic and drug induced brain injury in the newborn. The focus of the clinical science sector is to evaluate new drugs and the quality of new health care delivery systems. Dr. John McAuliffe presented his research concerning learning and behavior following neonatal hypoxic-ischemic injury in a mouse model. Dr. Andreas Loepke gave presentations concerning neuropathology following cardiopulmonary bypass in a neonatal piglet model and neurotoxicity in neonatal mouse model. Dr. Lindsey Nelson delivered presentations concerning optical techniques to measure brain oxygenation non-invasively in newborn pigs. Dr. Anna Varughese presented work on the quality of pre-anesthesia evaluations on peri-operative outcomes.

TRAINING

Basavana Gouda, MD
Dara Green, MD
Ximena Soler, MD
Angelika Strohm, MD
Thomas Taghon, MD
Vasudha Viswanathan, MD
Joshua Uffman, MD
Kenneth Yauney, MD
Julio Olaya, MD
Abraham Rosenbaum, MD

GRANTS, CONTRACTS AND INDUSTRY AGREEMENTS

Grant and Contract Awards

Annual Direct/Project Period Direct

Kurth, D

Frequency Domain Cerebral Oximeter for Pediatrics

National Institutes of Health (Near Infrared Monitoring subcontract)

R42 NS 39707

01/01/03 – 12/31/04

\$80,997/\$181,504

Current Year Direct

\$80,997

Industry Contracts

Gunter, J

Purdue University

\$4,504

Kurth, D

Baxter Healthcare Corporation

\$25,140

Nostix Corporation

\$11,229

Current Year Direct Receipts

\$40,873

TOTAL

\$121,870

PUBLICATIONS

1. **Aronson LA.** Transnasal placement of biplane transesophageal echocardiography probe intraoperatively in an adolescent with congenital heart disease. *Anesth Analg* 2003;97(6):1617-9.
2. **Loepke AW, Spaeth JP.** Glucose and heart surgery: neonates are not just small adults. *Anesthesiology* 2004;100(6):1339-41.