Row 1: M. Kibelbek, A. Tucker, V. Chidambaran, M. Baker, A. Mueller, A. Loepke, D. Kurth, J. McAuliffe, III
Row 2: K. Goldschneider, K. Lewellyn, M. Patino, B. Hugus, J. Spaeth
Row 3: S. Danzer, J. Estes, L. Roeder, K. Beutel, K. Franic-Everhart, M. Konig

Research and Training Details

<table>
<thead>
<tr>
<th>Details</th>
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<tr>
<td>Number of Faculty</td>
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<td>Number of Joint Appointment Faculty</td>
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<tr>
<td>Number of Research Fellows</td>
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<td>Number of Research Students</td>
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<td>Number of Support Personnel</td>
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<td>Direct Annual Industry Support</td>
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<td>Peer Reviewed Publications</td>
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Clinical Activities and Training

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<td>Number of Clinical Staff</td>
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<td>Number of Clinical Fellows</td>
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<td>Number of Clinical Students</td>
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<td>Number of Other Students</td>
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<td>Inpatient Encounters</td>
<td>15,836</td>
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<tr>
<td>Outpatient Encounters</td>
<td>31,272</td>
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</tbody>
</table>

Significant Publications

DanzerSC, He XP, Loepke AW and McNamara JO (2010) Structural plasticity of dentate granule cell
presynaptic terminals during the development of limbic epilepsy. Hippocampus, 20:113-124. PMC2801769


Faculty Members

C. Dean Kurth, MD, Professor; Anesthesiologist-in-Chief and Chair, Department of Anesthesia
Elena Adler, MD, Adjunct Associate Professor; Medical Director, Anesthesia Supply Chain, Division of Anesthesia
Nancy Andersen, MD, Adjunct Associate Professor
Lori Aronson, MD, Adjunct Associate Professor
Anne Boat, MD, Assistant Professor; Director, Fetal Surgery Team, Division of Anesthesia
Vidya Chidambaran, MD, Assistant Professor
Steve Danzer, PhD, Assistant Professor
Kenneth Goldsneider, MD, Associate Professor; Director, Division of Pain Management
Joel Gunter, MD, Professor
Nancy Hagerman, MD, Adjunct Assistant Professor; Co-Medical Director, Same Day Surgery and Pre-Anesthesia Consultation Clinic, Division of Anesthesia
Elizabeth Hein, MD, Adjunct Assistant Professor
Liana Hosu, MD, Assistant Professor
George Istaphanous, MD, Assistant Professor
Fay Jou, MD, Assistant Professor
Thomas Kabalin, MD, Associate Professor
Michael "Jack" Kibelbek, MD, Associate Professor
Matthias Konig, MD, Assistant Professor
Ik Lee, MD, Associate Professor; Director, Division of Anesthesia
Andreas Loepke, MD, PhD, Associate Professor
Mohamed Mahmoud, MD, Assistant Professor
John McAuliffe, MD, MBA, Associate Professor; Director, Research, Division of Neurobiology; Interim Director, Division of Neurobiology
Mark Meyer, MD, Assistant Professor; Director, Procedure Management, Division of Pain Management
David Moore, MD, Associate Professor; Clinical Coordinator, Anesthesia Fellow Pain Management Education, Division of Pain Management
Jacquelyn Morillo-Delerme, MD, Associate Professor; Director of Anesthesia, Liberty Campus, Division of Anesthesia
Mario Patino, MD, Assistant Professor
Joseph Previte, MD, FAAP, Associate Professor; Director, Information Technology Services, Division of Anesthesia
David Richards, PhD, Assistant Professor
Senthilkumar Sadhasivam, MD, Associate Professor
Nancy Samol, MD, Adjunct Assistant Professor
Paul Samuels, MD, Associate Professor; Director, Education, Department of Anesthesia
Thomas "Mike" Shackleford, DO, Assistant Professor
Ximena Soler, MD, Assistant Professor
James Spaeth, MD, Associate Professor; Associate Chief, Division of Anesthesia; Director, Cardiac Anesthesia Team, Division of Anesthesia
Theodore Striker, MD, Adjunct Professor
Alexandra Szabova, MD, Assistant Professor
Jon Tomasson, MD, Assistant Professor; Medical Director, Post Anesthesia Care Unit, Division of Anesthesia
Anna Varughese, MD, MPH, Associate Professor; Associate Chief, Division of Anesthesia; Director, Quality, Division of Anesthesia; Medical Director, Same Day Surgery and Pre-Anesthesia Consultation Clinic, Division of Anesthesia
Deborah Vermaire, MD, Adjunct Associate Professor; Director, Quality, Division of Pain Management
Norbert Weidner, MD, Associate Professor; Director, Palliative Care, Division of Pain Management; Medical Director, Starshine Hospice
Eric Wittkugel, MD, Associate Professor
Junzheng Wu, MD, Assistant Professor

Joint Appointment Faculty Members

Susmita Kashikar-Zuck, PhD, Associate Professor
Behaviorial Medicine & Clinical Psychology

Anne Lynch-Jordan, PhD, Assistant Professor
Behavioral Medicine & Clinical Psychology

Todd Nick, PhD, Professor
Epidemiology & Biostatistics

Clinical Staff Members
- Jasleen Goel, MD
- Clifford Hoffmann, MD

Trainees
- Rahul Baijal, MD, PGY-IV, Johns Hopkins School of Medicine
- Chandra Beals, MD, PGY-IV, University of Iowa
- Charles Eastwood, MD, PGY-IV, University of Vermont
- Lisa Francis, DO, PGY-IV, West Virginia University
- Erica Lin, MD, PGY-IV, University of North Carolina
- David Morse, MD, PGY-IV, University of Alabama at Birmingham
- Kristen Ogg, DO, PGY-IV, University Hospitals Case Medical Center
- Wade Smith, MD, PGY-IV, University of Arizona

Significant Accomplishments

Research Growth
Research growth in the past year has made our division one of the nation’s top three pediatric anesthesia departments in grant funding. Steve Danzer, PhD, received an NIH grant to investigate neuronal circuitry development in epilepsy and autism. David Richards, PhD, is using an NIH grant to investigate mechanisms of synaptic transmission. George Istaphants, MD, and Andreas Loepeke, MD, PhD, are using a Foundation for Anesthesia Education and Research (FAER) grant to investigate mechanisms of anesthetic neurotoxicity. And Senthilkumar Sadhasivam, MD, MPH, has a FAER grant to study the relationship between the genetics of morphine drug metabolism and side effects of morphine after surgery.

Regional Anesthesia Service Launched
The Division of Pain Management, led by David Moore, MD, Jacquelyn Morillo-Delerme, MD, Senthilkumar Sadhasivam, MD, MPH, and Richard Goins, implemented a regional anesthesia service at Cincinnati Children’s. During orthopedic and plastic surgery, catheters are inserted around peripheral nerves and local anesthetics are injected to produce selective postoperative analgesia for up to several days. Only a few children’s hospitals in the country offer such a service.

Neuromonitoring Service Begins
The Division of Neuobiology, led by John McAuliffe, MD, MBA, and Michelle Cooper, implemented a neuromonitoring
The Division of Neurobiology, led by John McAuliffe, MD, MBA, and Michelle Cooper, implemented a neuromonitoring service. This is the only such program in a pediatric anesthesiology department in the nation. During spine surgery, neurosurgery, or plastic surgery, this service monitors the integrity of the peripheral and central nervous systems. It helps protect patients from injury and enables the surgeons to attempt procedures that would otherwise be judged too risky to perform.

Grants, Contracts, and Industry Agreements

**Grant and Contract Awards**

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<thead>
<tr>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funding Agency</th>
<th>Grant Number</th>
<th>Start Date - End Date</th>
<th>Direct Funds</th>
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<tr>
<td>Danzer, S</td>
<td>Selective Disruption of Hippocampal Dentate Granule Cells in Autism: Impact of PTEN Deletion</td>
<td>National Institutes of Health</td>
<td>R01 NS 065020</td>
<td>05/01/09 - 04/30/14</td>
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<td>Contributions of Aberrant Granule Cell Integration to the Development of Epilepsy</td>
<td>National Institutes of Health</td>
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<td>08/05/09 - 07/31/14</td>
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<td>Short and Long-Term Impact of Neonatal Seizures on Hippocampal Granule Cell Integration</td>
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<td>06/01/09 - 05/31/11</td>
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<td>Richards, D</td>
<td>Regulation and Mechanisms of Synaptic Vesicle Exocytosis</td>
<td>National Institutes of Health</td>
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**Industry Contracts**

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<th>Company</th>
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<td>Tomasson, J</td>
<td>Nonin Medical, Inc.</td>
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**Current Year Direct**

$735,000

**Current Year Direct Receipts**

$22,808

**Total**

$757,808