

Anesthesiology

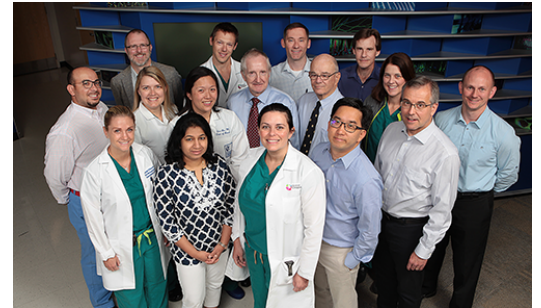
Division Details

RESEARCH AND TRAINING DETAILS

Faculty	64
Joint Appointment Faculty	2
Research Fellows and Post Docs	5
Research Graduate Students	8
Total Annual Grant Award Dollars	\$2,892,107
Total Annual Industry Award Dollars	\$15,730

CLINICAL ACTIVITIES AND TRAINING

Staff Physicians	5
Staff Psychiatrists	2
Clinical Fellows	15
Inpatient Encounters	23,787
Outpatient Encounters	38,624



Row 1: V Olbrecht, V Chidambaran, V Busso, C Lee, E Wittkugel, M Jankowski

Row 2: A Kandil, R Kreeger, E Lin, J McAuliffe, T Striker, J Lam

Row 3: R Cognill, M Mecoli, S Clay, S Danzer

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Division Publications

1. Wu LMN; Wang J; Conidi A; Zhao C; Wang H; Ford Z; Zhang L; Zweier C; Ayee BG; Maurel P. **Zeb2 recruits HDAC-NuRD to inhibit Notch and controls Schwann cell differentiation and remyelination.** *Nature Neuroscience*. 2016; 19:1060-1072.
2. Gross C; Yao X; Engel T; Tiwari D; Xing L; Rowley S; Danielson SW; Thomas KT; Jimenez-Mateos EM; Schroeder LM. **MicroRNA-Mediated Downregulation of the Potassium Channel Kv4.2 Contributes to Seizure Onset.** *Cell Reports*. 2016; 17:37-45.
3. Hosford BE; Liska JP; Danzer SC. **Ablation of Newly Generated Hippocampal Granule Cells Has Disease-Modifying Effects in Epilepsy.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 2016; 36:11013-11023.
4. Danzer SC. **Neurogenesis in Epilepsy: Better to Burn Out or Fade Away?.** *Epilepsy Currents*. 2016; 16:268-269.
5. Quevedo AS; Mørch CD; Andersen OK; Coghill RC. **Lateral inhibition during nociceptive processing.** *Pain*. 2017; 158:1046-1052.

6. Liu X; Green KJ; Ford ZK; Queme LF; Lu P; Ross JL; Lee FB; Shank AT; Hudgins RC; Jankowski MP. **Growth hormone regulates the sensitization of developing peripheral nociceptors during cutaneous inflammation.** *Pain*. 2017; 158:333-346.
7. Jiang Y; Tong D; Hofacer RD; Loepke AW; Lian Q; Danzer SC. **Long-term Fate Mapping to Assess the Impact of Postnatal Isoflurane Exposure on Hippocampal Progenitor Cell Productivity.** *Anesthesiology*. 2016; 125:1159-1170.
8. Aronson LA. **Images in Anesthesiology: Child with Junctional Epidermolysis Bullosa, Hoarseness, and Nasal Obstruction Demonstrating Severe Laryngeal Stenosis.** *Anesthesiology*. 2016; 125:1044-1044.
9. Smith A; Abruzzo T; Mahmoud M. **Vein of Galen Malformation and High-output Cardiac Failure.** *Anesthesiology*. 2016; 125:597-597.
10. Thienprayoon R; Porter K; Tate M; Ashby M; Meyer M. **Risk Stratification for Opioid Misuse in Children, Adolescents, and Young Adults: A Quality Improvement Project.** *Pediatrics*. 2017; 139:e20160258.
11. Subramanyam R; Mahmoud M; Buck D; Varughese A. **Infusion Medication Error Reduction by Two-Person Verification: A Quality Improvement Initiative.** *Pediatrics*. 2016; 138:e20154413.
12. LaSarge CL; Pun RYK; Muntifering MB; Danzer SC. **Disrupted hippocampal network physiology following PTEN deletion from newborn dentate granule cells.** *Neurobiology of Disease*. 2016; 96:105-114.
13. Schmidt AF; Kannan PS; Chougnet CA; Danzer SC; Miller LA; Jobe AH; Kallapur SG. **Intra-amniotic LPS causes acute neuroinflammation in preterm rhesus macaques.** *Journal of Neuroinflammation*. 2016; 13:238.
14. Patino M; Kalin M; Griffin A; Minhajuddin A; Ding L; Williams T; Ishman S; Mahmoud M; Kurth CD; Szmuk P. **Comparison of Postoperative Respiratory Monitoring by Acoustic and Transthoracic Impedance Technologies in Pediatric Patients at Risk of Respiratory Depression.** *Anesthesia and Analgesia*. 2017; 124:1937-1942.
15. Clebone A; Burian BK; Watkins SC; Gálvez JA; Lockman JL; Heitmiller ES; Members of the Society for Pediatric Anesthesia Quality and Safety Committee (see Acknowledgments). **The Development and Implementation of Cognitive Aids for Critical Events in Pediatric Anesthesia: The Society for Pediatric Anesthesia Critical Events Checklists.** *Anesthesia and Analgesia*. 2017; 124:900-907.
16. Chidambaran V; Venkatasubramanian R; Zhang X; Martin LJ; Niu J; Mizuno T; Fukuda T; Meller J; Vinks AA; Sadhasivam S. **ABCC3 genetic variants are associated with postoperative morphine-induced respiratory depression and morphine pharmacokinetics in children.** *The Pharmacogenomics Journal*. 2017; 17:162-169.
17. Molliver DC; Rau KK; Jankowski MP; Soneji DJ; Baumbauer KM; Koerber HR. **DELETION OF THE MURINE ATP/UTP RECEPTOR P2Y(2) ALTERS MECHANICAL AND THERMAL RESPONSE PROPERTIES IN POLYMODAL CUTANEOUS AFFERENTS.** *Neuroscience*. 2016; 332:223-230.
18. Wulsin AC; Herman JP; Danzer SC. **RU486 Mitigates Hippocampal Pathology Following Status Epilepticus.** *Frontiers in Neurology*. 2016; 7:214.
19. Levy RJ; Herbstman JB; Bosnjak ZJ; Loepke AW; McGowan FX. **Biomarkers, Genetics, and Epigenetic Studies to Explore the Neurocognitive Effects of Anesthesia in Children.** *Journal of Neurosurgical Anesthesiology*. 2016; 28:384-388.
20. Mahmoud M; Ishman SL; McConnell K; Fleck R; Shott S; Mylavarapu G; Gutmark E; Zou Y; Szczesniak R; Amin RS. **Upper Airway Reflexes are Preserved During Dexmedetomidine Sedation in Children With Down Syndrome and Obstructive Sleep Apnea.** *The Journal of Clinical Sleep Medicine*. 2017; 13:721-727.
21. Balyan R; Zhang X; Chidambaran V; Martin LJ; Mizuno T; Fukuda T; Vinks AA; Sadhasivam S. **OCT1 genetic variants are associated with postoperative morphine-related adverse effects in children.** *Pharmacogenomics*. 2017; 18:621-629.
22. Balyan R; Mecoli M; Venkatasubramanian R; Chidambaran V; Kamos N; Clay S; Moore DL; Mavi J; Glover CD; Szmuk P. **CYP2D6 pharmacogenetic and oxycodone pharmacokinetic association study in pediatric surgical patients.** *Pharmacogenomics*. 2017; 18:337-348.

23. Fleck RJ; Ishman SL; Shott SR; Gutmark EJ; McConnell KB; Mahmoud M; Mylavarapu G; Subramaniam DR; Szczesniak R; Amin RS. **Dynamic Volume Computed Tomography Imaging of the Upper Airway in Obstructive Sleep Apnea.** *The Journal of Clinical Sleep Medicine.* 2017; 13:189-196.
24. Chidambaran V; Pilipenko V; Spruance K; Venkatasubramanian R; Niu J; Fukuda T; Mizuno T; Zhang K; Kaufman K; Vinks AA. **Fatty acid amide hydrolase-morphine interaction influences ventilatory response to hypercapnia and postoperative opioid outcomes in children.** *Pharmacogenomics.* 2017; 18:143-156.
25. Jankowski MP; Baumbauer KM; Wang T; Albers KM; Davis BM; Koerber HR. **Cutaneous neurturin overexpression alters mechanical, thermal, and cold responsiveness in physiologically identified primary afferents.** *Journal of neurophysiology.* 2017; 117:1258-1265.

Grants, Contracts, and Industry Agreements

Annual Grant Award Dollars

Investigator	Title	Sponsor	ID	Dates	Amount
Steve Danzer, PhD	Identification and Reversal of Primary and Secondary Epileptogenic Changes	National Institutes of Health	R01 NS065020	05/01/2014 - 04/30/2019	\$392,730
Vidya Chidambaran, MD	Morphine Pharmacogenomics to Predict Risk of Respiratory Depression in Children	National Institutes of Health	K23 HD082782	09/01/2014 - 06/30/2019	\$130,905
Steve Danzer, PhD	mTOR Regulation of Aberrant Neuronal Integration and Epileptogenesis in Epilepsy	National Institutes of Health	R01 NS062806	04/15/2015 - 03/31/2020	\$454,088
Erica Peiyeh Lin, MD	Protective Anesthetic Strategies During Neonatal Brain Ischemia	International Anesthesia Research Society	IARS - Lin, Erica	07/01/2015 - 06/30/2017	\$75,000
Robert C Coghill, PhD	Brain Mechanisms Supporting Individual Differences in Pain	National Institutes of Health	R01 NS085391	07/01/2015 - 04/30/2020	\$561,433
Christopher D. King, PhD	Psychological and Physiological Correlates of Endogenous Pain Modulation Patients with Temporomandibular Joint Disorder (TMJD).	National Institutes of Health	R00 DE022368	08/01/2015 - 07/31/2018	\$220,269
Senthilkumar Sadhasivam, MD	Pharmacogenetics of Oxycodone, Personalized Care and Persistent Surgical Pain	National Institutes of Health	R01 HD089458	09/22/2016 - 08/31/2021	\$526,410
Jessica L Ross, PhD	Linking Sex Differences in Cardiovascular Reflexes and Pain Perception	National Institutes of Health	F31 AR068896	08/08/2016 - 08/07/2018	\$36,036
Luis Fernando Queme	Role of GDNF in the	American Heart	16POST29750004	07/01/2016	\$50,350

Cobar, PhD	Sensitization of Primary Muscle Afferents during Muscle Ischemia/Reperfusion Injury	Association - National		-	06/30/2018	
Jayant Nick Pratap	Using the Electronic Health Record to Identify Children Likely to Suffer Last-minute Surgery Cancellation	Agcy for Healthcare Research and Quality	R21 HS024983	09/01/2016	\$119,761	-
Michael P Jankowski, PhD	Mechanisms of Muscle Afferent Sensitization after Ischemia	National Institutes of Health	R01 AR064551	09/01/2016	\$325,125	-
				08/31/2018		
Total Annual Grant Award Dollars						\$2,892,107

Annual Industry Award Dollars

Investigator	Industry Sponsor	Amount
James S Furstein, PhD, CRNA, CNP	Halyard Health	\$15,730
Total Annual Industry Award Dollars		\$15,730
