Neurology

Division Details

RESEARCH AND TRAINING DETAILS

<table>
<thead>
<tr>
<th>Faculty</th>
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<tr>
<td>Joint Appointment Faculty</td>
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<tr>
<td>Research Fellows and Post Docs</td>
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<td>Research Graduate Students</td>
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<tr>
<td>Total Annual Grant Award Dollars</td>
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<tr>
<td>Total Annual Industry Award Dollars</td>
<td>$2,905,087</td>
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CLINICAL ACTIVITIES AND TRAINING

| Staff Physicians | 1  |
| Clinical Fellows | 5  |
| Inpatient Encounters | 3,339 |
| Outpatient Encounters | 31,060 |

Division Publications

1. Powers SW; Coffey CS; Chamberlin LA; Ecklund DJ; Klingner EA; Yankey JW; Korbee LL; Porter LL; Hershey AD; Investigators CHAMP. Trial of Amitriptyline, Topiramate, and Placebo for Pediatric Migraine. The New England journal of medicine. 2017; 376:115-124.

2. French JA; Lawson JA; Yapici Z; Ikeda H; Polster T; Nobbout R; Curatolo P; de Vries PJ; Diogos DJ; Berkowitz N. Adjunctive everolimus therapy for treatment-resistant focal-onset seizures associated with tuberous sclerosis (EXIST-3): a phase 3, randomised, double-blind, placebo-controlled study. The Lancet. 2016; 388:2153-2163.

3. Martin KR; Zhou W; Bowman MJ; Shih J; Au KS; Dittenhafer-Reed KE; Sisson KA; Koeman J; Weisenberger DJ; Cottingham SL. The genomic landscape of tuberous sclerosis complex. Nature Communications. 2017; 8:15816.

4. Glauser TA; Holland K; O’Brien VP; Keddache M; Martin LJ; Clark PO; Cnaan A; Dlugos D; Hirtz DG; Shinnar S. Pharmacogenetics of Antiepileptic Drug Efficacy in Childhood Absence Epilepsy. Annals of Neurology. 2017; 81:444-453.

6. Sánchez Fernández I; Jackson MC; Abend NS; Arya R; Brenton JN; Carpenter JL; Chapman KE; Gaillard WD; Gainza-Lein M; Glauser TA. Refractory status epilepticus in children with and without prior epilepsy or status epilepticus. *Neurology*. 2017; 88:386-394.

7. Cnaan A; Shinnar S; Arya R; Adamson PC; Clark PO; Dlugos D; Hirtz DG; Masur D; Glauser TA; Study CAE. Second monotherapy in childhood absence epilepsy. *Neurology*. 2017; 88:182-190.

8. Payne JM; Barton B; Ulrich NJ; Cantor A; Hearps SJC; Catter G; Rosser T; Walsh KS; Gioia GA; Wolters PL. Randomized placebo-controlled study of lovastatin in children with neurofibromatosis type 1. *Neurology*. 2016; 87:2575-2584.


12. López-Juárez A; Titus HE; Silbak SH; Pressler JW; Rizvi TA; Bogard M; Bennett MR; Ciraolo G; Williams MT; Vorhees CV. Oligodendrocyte Nf1 Controls Aberrant Notch Activation and Regulates Myelin Structure and Behavior. *Cell Reports*. 2017; 19:545-557.


17. Palomo V; Perez DI; Roca C; Anderson C; Rodríguez-Muela N; Perez C; Morales-Garcia JA; Reyes JA; Campillo NE; Perez-Castillo AM. Subtly Modulating Glycogen Synthase Kinase 3 beta: Allosteric Inhibitor Development and Their Potential for the Treatment of Chronic Diseases. *Journal of Medicinal Chemistry*. 2017; 60:4983-5001.

18. Tajhya RB; Hu X; Tanner MR; Huq R; Kongchan N; Neilson JR; Rodney GG; Horigan FT; Timchenko LT; Beeton C. Functional KCa1.1 channels are crucial for regulating the proliferation, migration and differentiation of human primary skeletal myoblasts. *Cell death & disease*. 2016; 7:e2426-e2426.


20. Wink LK; Minshawi NF; Shaffer RC; Pawlacki MH; Posey DJ; Horn PS; Adams R; Pedapati EV; Schaefer TL; McDougle CJ. D-Cycloserine enhances durability of social skills training in autism spectrum disorder. *Molecular Autism*. 2017; 8:2.

22. Thomson KE; Modi AC; Glauser TA; Rausch JR; White HS. **The impact of nonadherence to antiseizure drugs on seizure outcomes in an animal model of epilepsy.** *Epilepsia.* 2017; 58:1054-1062.

23. Arya R; Wilson JA; Fujiwara H; Rozhkov L; Leach JL; Byars AW; Greiner HM; Vannest J; Buroker J; Milsap G. **Presurgical language localization with visual naming associated ECoG high- gamma modulation in pediatric drug-resistant epilepsy.** *Epilepsia.* 2017; 58:663-673.

24. Skoch J; Adelson PD; Bhatia S; Greiner HM; Rydenhag B; Scavarda D; Mangano FT. **Subdural grid and depth electrode monitoring in pediatric patients.** *Epilepsia.* 2017; 58 Suppl 1:56-65.

25. Vannest J; Tenney JR; Altaye M; Byars AW; Spencer C; Maloney TC; Szafiarski JP; Morita D; Glauser TA. **Impact of frequency and lateralization of interictal discharges on neuropsychological and fine motor status in children with benign epilepsy with centrotemporal spikes.** *Epilepsia.* 2016; 57:e161-e167.

### Grants, Contracts, and Industry Agreements

**Annual Grant Award Dollars**

<table>
<thead>
<tr>
<th>Investigator</th>
<th>Title</th>
<th>Sponsor</th>
<th>ID</th>
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<tr>
<td>Tracy A Glauser, MD</td>
<td>Cincinnati Neuroscience Clinical Trials Research Center (CinciNEXT)</td>
<td>National Institutes of Health (University of Cincinnati)</td>
<td>U10 NS077311</td>
<td>09/30/2011 - 06/30/2018</td>
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<td>Darcy Krueger, MD</td>
<td>Early Biomarkers of Autism Spectrum Disorders in Infants with Tuberculous Sclerosis Complex</td>
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<td>Developmental Synaptopathies Associated with TSC, PTEN and SHANK3 Mutations</td>
<td>National Institutes of Health (Children's Hospital Boston)</td>
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<td>Preventing Epilepsy Using Vigabatin in Infants with Tuberculous Sclerosis Complex</td>
<td>National Institutes of Health (University of Alabama-Birmingham)</td>
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<td>Matthew R Skelton, PhD</td>
<td>The role of Na+, K+-ATPase function in Creatine Transporter Deficiency</td>
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<td>Donald L Gilbert, MD</td>
<td>GABAergic Sensorimotor Dysfunction in Tourette Syndrome</td>
<td>National Institutes of Health (Kennedy Krieger Research Institute)</td>
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<td>Christina Gross, PhD</td>
<td>MicroRNA-mediated Silencing of the Kv4.2 Complex in Epilepsy</td>
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<td>Shannon Michelle Standridge, DO, MPH</td>
<td>Rett Syndrome, MECP2 Duplication, and Rett Related Disorders Natural History Study</td>
<td>National Institutes of Health (International Rett Syndrome Foundation)</td>
<td>U54 HD061222</td>
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<td>Tracy A Glauser, MD</td>
<td>Pediatric Status Epilepticus Research Group</td>
<td>Pediatric Epilepsy Research Fdn (Children's</td>
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<tr>
<td>Brenda Ly Wong, MD</td>
<td>GlaxoSmithKline</td>
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**Pilot Study to Evaluate the Feasibility of a Novel Voluntary Movement Suppression Paradigm using Real-time Motor Physiological Feedback in Children with TS**

Donald L Gilbert, MD

Tourette Syndrome Association, Inc.

Gilbert_TSA

08/01/2016  $63,275

07/31/2017

**Collaborative Assessment of Pediatric Transverse Myelitis: Understand, Reveal, Educate-CAPTURE Study**

Allen DeSena, MD, MPH

Patient-Centered Outcome Research Inst. (The University of Texas Southwestern)

GMO 160415

05/01/2016  $20,001

04/30/2017

**Annual Meeting of the Neurobehavioral Teratology Society**

Charles V Vorhees, PhD

Food and Drug Administration

R13 FD004852

07/01/2015  $5,000

06/30/2018

**Teratology Training Grant**

Charles V Vorhees, PhD

National Institutes of Health

T32 ES007051

07/01/2016  $335,060

06/30/2017

**Manuscript - The Clinical Utility of Urinary Estrogen and Progesterone Metabolites in the Prediction of Headache in Adolescent Female Migraineurs**

Andrew D Hershey, MD, PhD

National Headache Foundation (University of Cincinnati)

NHF_Hershey

02/01/2016  $3,245

05/31/2016

**TSC Natural History Database Project**

Darcy Krueger, MD

Tuberous Sclerosis Alliance

2013DB18Y3

05/01/2016  $117,020

12/31/2018

**Genomics of Migraine from the CHAMP Study: DNA Exome Sequencing**

Andrew D Hershey, MD, PhD

Migraine Research Foundation

Hershey_MRF

01/01/2017  $49,979

12/31/2017

**DM Conference Grant**

Lubov Timchenko, PhD

Marigold Foundation

Marigold_Timchenko

10/15/2016  $10,000

10/14/2019

**Research Coordinator Support for TSCure Project**

Darcy Krueger, MD

Tuberous Sclerosis Alliance

2016-TSCURE-01

12/01/2016  $50,000

11/30/2017

**TSC Biosample Repository Contract**

Darcy Krueger, MD

Tuberous Sclerosis Alliance

2016BSR18

12/01/2016  $44,920

12/31/2018

**Total Annual Grant Award Dollars**

$2,531,799

**Annual Industry Award Dollars**

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<tr>
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<td>Brenda Ly Wong, MD</td>
<td>GlaxoSmithKline</td>
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<td>Name</td>
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<td>John Lynn Jefferies, MD</td>
<td>Summit Pharmaceuticals International</td>
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<td>Charles V Vorhees, PhD</td>
<td>Intra-Cellular Therapies</td>
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<td>Cuixia Tian, MD</td>
<td>Pfizer, Inc.</td>
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<td>Donald L Gilbert, MD</td>
<td>Neurocrine Biosciences</td>
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<td>Teva Pharmaceuticals</td>
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<td>Shannon Michelle Standridge, DO, MPH</td>
<td>Neuren Pharmaceuticals Limited</td>
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<td>Steve Wu, MD</td>
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<td><strong>Total Annual Industry Award Dollars</strong></td>
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