

# **Pediatric Physical Medicine and Rehabilition**



First Row: D, Pruitt; Second Row: M. McMahon, L. Michaud, J. Vargus-Adams, L. Holman; Third Row: D. Kinnett, S. Wade

## **Division Data Summary**

#### **Research and Training Details**

Number of Faculty	6
Number of Support Personnel	10
Direct Annual Grant Support	\$1,000,445
Peer Reviewed Publications	8
Clinical Activities and Training	

Number of Clinical Staff	1
Number of Clinical Fellows	1
Inpatient Encounters	2,149
Outpatient Encounters	3,684

## **Faculty Members**

Linda Michaud, MD, Associate Professor; Division Director; Aaron W. Perlman Professor

Douglas Kinnett, MD, Associate Professor; Director, Spasticity Management Program

Mary McMahon, MD, Assistant Professor; Director, Residency Training Program, UC Dept. of PM&R; Director, Medical Student Education, UC Dept. of PM&R

David Pruitt, MD, Assistant Professor; Director, A4Rehab

Jilda Vargus-Adams, MD, Assistant Professor

Shari Wade, PhD, Research Professor; Director of Research

#### **Clinical Staff Members**

Lainie Holman, MD

#### **Trainees**

- Glendaliz Bosques, MD, PGY-5, Baylor College of Medicine/University of Texas Houston
- Micah Baird, MD, PGY-4, Wright State University
- Matthew Mayer, MD, PGY-3, University of Cincinnati
- Phoebe Scott-Wyard, DO, PGY-2, Western University of Health Sciences
- Tobias Tsai, MD, PGY-2, Johns Hopkins University
- · Kimberly Hartman, MD, PGY-1, Wayne State University

## Significant Accomplishments in FY08

#### Helping Teens Cope After Brain Injury

Computers, web cameras and high speed internet might help teens and families cope after traumatic brain injury by reducing behavior problems and distress. Shari Wade, PhD, is leading a three-year, multi-site study to find out. The study will look at outcomes of online, family-centered problem-solving therapy compared with online resources and information. The study, funded by the National Institute of Mental Health and conducted with Case Western Reserve University, is among the largest trials to date of a psychological intervention aimed at reducing behavioral disorders following traumatic brain injury.

#### **Support for Brain Tumor Patients**

Working with the Neuro-Oncology Clinic multidisciplinary team, David Pruitt, MD, follows patients longitudinally. His role is to help reduce disability as a result of treatment or disease progression and to lessen its impact on quality of life, as well as to manage long-term deficits. Dr. Pruitt and his team are designing research protocols to treat people with specific tumors, specifically assessing functional capabilities during and after treatment.

### **Division Publications**

- 1. Karunanayaka PR, Holland SK, Yuan W, Altaye M, Jones BV, Michaud LJ, Walz NC, Wade SL. <u>Neural substrate</u> <u>differences in language networks and associated language-related behavioral impairments in children with TBI: a preliminary fMRI investigation</u>. *NeuroRehabilitation*. 2007; 22: 355-69.
- 2. Michaud LJ, Duhaime AC, Wade SL, Rabin JP, Jones DO, Lazar MF. "Traumatic brain injury." In: ML Batshaw, L Pellegrino, NJ Roizen, eds. *Children with disabilities*. Baltimore: Paul H. Brookes Pub. Co.; 2007: 461-476.
- 3. Rapson A, Rappaport DI, Holman L, Michaud L, Doyne E, Durrani A, Lanuza K, Ang J, Kamat D, Silver ES. <u>Index of suspicion</u>. *Pediatr Rev.* 2007; 28: 343-51.
- 4. Yuan W, Holland SK, Schmithorst VJ, Walz NC, Cecil KM, Jones BV, Karunanayaka P, Michaud L, Wade SL. <u>Diffusion tensor MR imaging reveals persistent white matter alteration after traumatic brain injury experienced during early childhood</u>. *AJNR Am J Neuroradiol*. 2007; 28: 1919-25.
- 5. Carey JC, Wade SL, Wolfe CR. <u>Lessons learned: the effect of prior technology use on Web-based interventions</u>. *Cyberpsychol Behav.* 2008; 11: 188-95.
- Kramer ME, Chiu CY, Walz NC, Holland SK, Yuan W, Karunanayaka P, Wade SL. <u>Long-term neural processing of attention following early childhood traumatic brain injury: fMRI and neurobehavioral outcomes</u>. *J Int Neuropsychol Soc.* 2008; 14: 424-35.
- Wade SL, Taylor HG, Walz NC, Salisbury S, Stancin T, Bernard LA, Oberjohn K, Yeates KO. Parent-child interactions during the initial weeks following brain injury in young children. Rehabil Psychol. 2008; 53: 180-190.
- 8. Walz NC, Cecil KM, Wade SL, Michaud LJ. <u>Late proton magnetic resonance spectroscopy following traumatic brain injury during early childhood: relationship with neurobehavioral outcomes</u>. *J Neurotrauma*. 2008; 25: 94-103.

Grants, Contracts, and Industry Agreements

**Grant and Contract Awards** 

**Annual Direct / Project Period Direct** 

Vargus-Adams, J

Minimal Clinically Important Differences in Cerebral Palsy

United Cerebral Palsy Research and Education Foundation

07/01/06 - 06/30/09 \$68,182 / \$204,545

**Towards Improved Clinical Trials In Cerebral Palsy** 

National Institutes of Health

K23 HD 049552 09/30/06 - 08/31/11 \$118,000 / \$590,000

Wade, S

Social Influences on Long Term Recovery from Traumatic Brain Injury in Young Children

Ohio Department of Public Safety

00783 07/01/07 - 06/30/08 \$82,500 / \$82,500

The Neural Substrates of Social and Executive Function Deficits in Internationally Adopted Children

University of Cincinnati

07/01/07 - 06/30/08 \$25,000 / \$25,000

Teen Online Problem Solving for Pediatric Brain Injury

US Department of Education

Web Therapy to Improve Outcomes after Traumatic Brain Injury in Young Children

US Department of Education

Improving Mental Health Outcomes of Child Brain Injury

National Institutes of Health

**Current Year Direct** 

\$1,000,445

Total \$1,000,445