

# Division of General Pediatrics and USC UCEDD



## Annual Research Report 2009



**Division of General Pediatrics and USC UCEDD Annual Research Report:  
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## **Division of General Pediatrics and USC UCEDD Annual Research Report**

### **Description of the Division of General Pediatrics and USC UCEDD**

Faculty members of the Division of General Pediatrics and USC UCEDD are involved in a number of research projects that span the range of psychosocial and prominent health care issues affecting infants, children and youth and their families living in our culturally and ethnically diverse urban community.

Several studies are currently in progress with children and youth with Autism Spectrum Disorder (ASD) and spina bifida. The studies involving children and youth with ASD are focused on investigating the diagnostic factors associated with the ASD and Rett Syndrome and innovative approaches to facilitating the development of social skills in children with ASD (Yin, Smith, Williams). Several studies have involved children and youth with spina bifida and their families. These studies examine bowel and bladder continence in children and youth with spina bifida, collection of data for the national spina bifida registry and health care transition planning in youth with spina bifida. Other studies involving children and youth with spina bifida and families involve investigations of the role of culture in accessing services, adolescents' participation in research studies and their use of technology (Betz, Jacobs, Smith).

Prominent themes of studies conducted and planned within the Division are investigations related to health disparities and cultural influences, quality improvement and obesity. Several Division faculty members have focused their efforts on examining the health disparities of Latino, Asian/Pacific Islander and African American populations (Javier, Meneses, Wheeler). These studies are directed to investigating issues pertaining to access to care, research recruitment and cultural barriers. Recently a study to test the effectiveness of obesity preventive strategies was submitted to NIH (Yin). Quality improvement has been a topic of interest of Division faculty members (Takata, Chen) as is evidence-based medicine (Takata). Studies related to quality improvement are investigating medication errors and the development of quality assessment tools for pediatric patients hospitalized for respiratory illnesses and outpatients with complex pediatric conditions.

As this description of Division research activities indicates, faculty members are directed to increasing the extent to which they are involved in research activities. It is expected that this activity will continue to increase in the upcoming year.

### **Scientific Accomplishments**

Major scientific accomplishments of the Division reflect the commitment to contribute to the science of pediatrics. Our achievements during the past year demonstrate our ongoing and continued growth in this regard. Efforts by the faculty reflect increases in the number of data based and scholarly manuscripts submitted to and accepted by peer reviewed journals with high impact factors; presentations given at national scientific and professional meetings; and submissions of research proposals for extramural funding.

- **Research Development Awards:** Three GPS faculty members have received development awards. Drs. Joyce Javier and Douglas Vanderbilt have received CHLA Department of Pediatrics Mentored Junior Faculty Academic Career Development Awards for their work investigating the unmet needs of Asian/Pacific Islanders for

mental health services and the risk factors of infants with Twin-Twin Transfusion Syndrome respectively. Dr. Veronica Meneses, a Robert Woods Foundation Fellow, is completing her research study examining sexuality in youth with developmental disabilities. In addition, Dr. Mona Patel was the recipient of the Barbara Korsch Award to study home safety hazards.

- **Publications:** As listed below, a total of 26 publications were generated by Division faculty members. These scholarly, empirical and evidence based publications reflect the richness of expertise and interests of the Division faculty. The number of publications submitted and accepted has continued to increase each year
- **Presentations:** Several Division faculty presented research findings at major research meetings. A representative sample follows:

**Finello K.** *Measurement issues in relationship-based work with very young children & their families.* Paper presentation at the Society for Research in Child Development, Denver, Colorado, April 2, 2009.

**Jacobs RA, Meurer J, Ben-Isaac E.** *Community health centers/FQHCs: opportunities for academic pediatrics.* Workshop at the Pediatric Academic Societies Annual Meeting, Baltimore, May 2-5, 2009

**Javier JR, Huffman LC.** *Psychological distress and mental health care utilization among Asian American subgroups.* Poster presentation at the Pediatric Academic Societies Annual Meeting, Baltimore, Maryland, May 2-5, 2009.

**Javier JR, Huffman LC.** *Examining psychological distress and mental health care utilization in Filipino American adolescents.* Oral presentation at the American Public Health Association Meeting, October 25-29, 2008.

**Johns A, Garcia L, Haynes K, Lau H, McKee P.** *Group curriculum for parents of infants with cleft diagnosed prenatally or neonatally.* Workshop at the 66<sup>th</sup> Annual American Cleft Palate-Craniofacial Association Conference, Scottsdale, Arizona, April, 2009.

**Johns A, Miller S.** *Effects of visual art project on children in craniofacial pediatric waiting room.* Paper presentation at the 66<sup>th</sup> Annual American Cleft Palate-Craniofacial Association Conference, Scottsdale, Arizona, April, 2009.

**Johns A, Garcia L.** *Psychosocial strategies to facilitate provision of craniofacial team services to Latino families.* Paper presentation at the National Latino/a Psychological Association Conference, Costa Mesa, California, November 2008.

Nicolaou DC, **Johns A, Garcia L.** *Support group curriculum for parents of girls with craniofacial differences.* Poster presentation at the 116<sup>th</sup> Annual American Psychological Association Convention, Boston, Massachusetts, August, 2008.

**Smookler G.** *Review of cumulative diagnostic radiation exposure during childhood in patients with spina bifida.* Oral presentation at the Society for Research into Hydrocephalus and Spina Bifida, Queens University, Belfast, United Kingdom, June 24-27, 2009.

**Takata GS, Taketomo C.** *A pediatric aide trigger tool to identify medication-related harm in hospitalized children.* Oral presentation at the 2008 California Society of Health-Systems Pharmacists Annual Meeting, October 10, 2008.

- **Extramural Funding:** Several USC Center for Excellence in Developmental Disabilities (UCEDD) research projects have received extramural funding from National Institutes of Health (NIH) (Betz, Wheeler) and Centers for Disease Control (CDC) (Jacobs, Smith). Since July 1, 2008 a total of 5 research proposals were submitted for extramural funded. The agencies to which these proposals were submitted were NIH and CDC. Two of the research projects submitted were submitted in collaboration with academic and/or community-based partners. General Pediatrics faculty have also received funding from the National Heart, Lung and Blood Institute and the Agency for Healthcare Research and Quality (AHRQ) (Chen, Takata).
- **Collaboration:** Our research efforts also reflect collaborations with other researchers from the other CHLA divisions, the USC Health Science and main USC campus. As example of this collaborative effort is the joint UCEDD and Zilkha Neurogenetic Institute project examining the Genotype/Phenotype of Children with Rett Syndrome.

The achievements described above demonstrate the growing involvement of the Division faculty members in research and scholarly activities. It is expected with the strategic emphasis on generating a more visible national research presence and the increasing institutional support available for faculty, that more research studies will be initiated and conducted and greater numbers of extramural research proposals will be submitted.

### **Strategic Accomplishments**

Major strategic accomplishments of the Division of General Pediatric research program reflect the broad range reflected in its scientific accomplishments and lay the groundwork for vigorous Division research activities in the coming years aligned with national priorities such as children with special healthcare needs and developmental disabilities, quality improvement and patient safety, evidence-based medicine, diversity, health status, and obesity.

- **Children with Special Healthcare Needs and Developmental Disabilities:** Through the UCEDD and the General Pediatrics faculty, the Division has developed a strong foundation for research to advance the healthcare of children with special healthcare needs and developmental disabilities. This strength is particularly true with respect to research on children with spina bifida and transitions in care.
- **Health Services Research:** Health services research has developed into an area of strength by individual Division researchers. This strength is reflected in research on the science of quality improvement including assessment, patient safety, evidence-

- based medicine, and the relationship of health status to family structure, diversity, cultural competence, and immigration.
- **Developmental-Behavioral Pediatrics:** The Division's Developmental-Behavioral Program has developed an aggressive research agenda that will propel its research activities significantly in the near future: The focus on autism intervention strategies coincides with the current national focus on autism as a population-based issue of significance, and the UCEDD entry into genomic studies to decipher the underlying mechanisms of Rett Syndrome, a neurodevelopmental disorder, is a significant step into this field of cutting-edge research.
  - **Obesity:** Aligned with national concerns, including those of the American Academy of Pediatrics, research on obesity prevention and intervention is being developed as a focus of the Division.

Finally, the Division continues to be committed to encouraging faculty research in these difficult fiscal times. During the past year, under Division leadership, a monthly research seminar has been initiated to share research findings, exchange information amongst Division researchers, and to serve as a venue for research networking. These seminars have been well received and have served to stimulate the research conversation and culture within the Division.

## Publications

**Ben-Isaac E, Schrager S, Keefer M, Chen A.** National profile of non-emergent pediatric ed visits. *Pediatrics*, forthcoming, April 2010

**Betz C.** To tattoo or not: that is the question. *Journal of Pediatric Nursing* 2009;24(4):241-243. PMID: 19632501

**Betz CL.** The challenge of providing culturally competent services. *Journal of Pediatric Nursing* 2008;23(6):411-414. PMID: 19026909

**Betz CL.** Frequently asked questions....again and again. *Journal of Pediatric Nursing* 2008;23(5):329-330.

**Betz CL, Ruccione K, Meeske K, Smith K, Chang N.** Health literacy: a pediatric nursing concern. *Pediatric Nursing* 2008;34:231-329. PMID: 18649813

**Betz CL.** Forthcoming issues to confront as children with special health care needs grow up. *Journal of Pediatric Nursing* 2008;23:329-330. PMID: 18638667

Chang RK, **Chen AY.** Impact of palivizumab on rsv hospitalizations for children with hemodynamically significant congenital heart disease. *Pediatric Cardiology* 2009: Nov 14. [Epub ahead of print] PMID: 19915892

Chang RK, Keens T, Rodriguez S, **Chen AY.** Sudden infant death syndrome: changing

epidemiologic patterns in California 1989-2004. *J of Pediatrics* 2008;153(4):498-502. PMID: 18534214

**Chen AY**, Kim SE, Houtrow AJ, Newacheck PW. Prevalence of obesity among children with chronic conditions. *Obesity* 2009: Jun 11. [Epub ahead of print] PMID: 19521350

**Javier JR**, Huffman LC, Mendoza FS, Wise PH. Children with special health care needs: how immigrant status is related to health care access, health care utilization, and health status. *Maternal Child Health J*. Epub 2009 Jun 25. PMID 19554437

**Javier JR**, Lahiff M, Ferrer RH, Huffman LC. Examining depressive symptoms and use of counseling in the past year among filipino and non-hispanic white adolescents in california. *Journal of Developmental and Behavioral Pediatrics*, accepted for publication.

**Javier JR**, Liu TM. Asian American Child Health. In Praeger Handbook of Asian American Health: Taking Notice and Taking Action. Westport: Praeger/Greenwood Press; 2009.

**Johns AL**, Oland A, Katz E, Sahler O, Askins M, Butler R, Dolgin M. (2009). Qualitative analysis of the role of culture in coping themes of Latina and European-American mothers of children with cancer. *Journal of Pediatric Oncology Nursing* 2009;26:167-175. PMID: 19398713

**Leggett B, Ben-Isaac E.** (2009). Hypertension in a 3-year old boy. *Consultant for Pediatrician* 2009;8(3):96-99.

Nelson, R., Cho, M., **Ben-Isaac, E.** Where Have All the White Cells Gone? *Paediatrics & Child Health*, forthcoming

Nicolaou DC, **Johns A**, Garcia L. Girl Talk parent support group: a group intervention for parents of girls with craniofacial differences. *The Group Psychologist* 2008;18:11-12.

Ong PY, **Patel M**, Ferdman RM, Dunaway T, Church JA. Association of staphylococcal superantigen-specific immunoglobulin e with mild and moderate atopic dermatitis. *J Pediatr* 2008 Dec;153(6):803-806. PMID: 18621391

**Patel M**, Stafford B. Index of suspicion: diamond blackfan anemia. *Pediatrics in Review*, forthcoming January 2010.

Sharek PJ, McCleod RE, Taketomo C, Luria JW, **Takata GS**, Sterner-Allison J, Walti B, Tanski M, Nelson C, Logsdon TR, Thurn C, Federico F. An intervention to decrease narcotic-related adverse drug events in children's hospitals. *Pediatrics* 2008;122:e861-e866. PMID: 18829784

**Takata GS**, Taketomo CK, Waite S. Medication errors and adverse drug events in the California Pediatric Patient Safety Initiative. *American Journal of Health-System Pharmacy* 2008; 65:2036-2044. PMID: 18945863

**Vanderbilt D**, Bushley T, Young R, Frank DA. Acute posttraumatic stress symptoms among urban mothers with newborns in the NICU: A Preliminary Study. *Journal of Developmental and Behavioral Pediatrics* 2009;30(1):50-56. PMID: 19194322

**Vanderbilt D**, Young R, MacDonald HZ, Grant-Knight W, Saxe G, Zuckerman B. Asthma severity and PTSD symptoms among inner-city children: a pilot study. *Journal of Trauma and Dissociation* 2008;9(2):191-207. PMID: 19042774

**Williams ME**, Atkins M, Soles T. Assessment of autism in community settings: discrepancies in classification. *Journal of Autism and Developmental Disorders*, 2009; 39(4):660-669. PMID: 19051002

Wren T, **Chen AY**, Wang VJ, Claudius I, Skaggs DL. Prior treatment of fracture patients in a tertiary pediatric emergency department: informal referrals from other emergency departments. *J of Pediatric Orthopaedics* 2009;29(2):137-41. PMID: 19352238

**Yin L**, Bottrell C, **Clarke N**, Shacks J, **Poulsen MK**. Otoacoustic emissions: a valid, efficient first-line hearing screen for preschool children. *J Sch Health* 2009 Apr;79(4):147-52. PMID: 19292846.

**Yin L**, Wills H, **Clarke N**, Shacks J, Bottrell CL, **Poulsen MK**. Cardiovascular risk in preschool children. *Infant, Child, Adolescent Nutrition* 2009;1:197-204.