BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME	POSITION TITLE		
Mullins, Larry Lee	Regents Professor, Department of Psychology		
eRA COMMONS USER NAME (credential, e.g., agency login) LARRYMULLINS	Associate Dean for Research, Oklahoma State University		

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Oklahoma State University, Stillwater, Oklahoma	BA	12/77	Psychology
University of Missouri-Columbia, Columbia, Missouri	MA	08/81	Clinical Psychology
University of Missouri-Columbia, Columbia, Missouri	PhD	08/83	Clinical Psychology

A. Personal Statement

Our multi-institutional, interdisciplinary group of investigators has prospectively followed a large and diverse group of children born with ambiguous genitalia due to DSD across 12 sites to determine short-term (6 to 60 months) cosmetic outcomes of, and complications associated with, modern genitoplasty procedures. We have also been assessing psychosocial adjustment outcomes in their parents. The goal of the proposed research is to develop an electronic intervention based on the construct of illness for parents of children born with ambiguous external genitalia.

I have extensive experience in training and overseeing personnel to conduct research in this under-studied clinical population. Since 2007, our multidisciplinary team DSD clinic has grown dramatically, thus providing appropriate access to patients with DSD – a collection of rare disorders. Our clinic is now being used as a model for other academic medical institutions both nationally and internationally. I have been engaged in an ongoing collaboration with the Department of Urology and Dr. Amy Wisniewski at the University of Oklahoma Health Sciences Center over the past eight years, producing five manuscripts in the area of DSD and an NICHD R01 as Co-PIs. The current application builds logically on my prior work in intervention science and illness uncertainty, and I will work again with Dr. Wolfe Christensen as a Co-Investigator to successfully carry out this project. I have also successfully managed personnel in conducting clinical studies including ensuring that regulatory issues are appropriately addressed, developing study designs, as well as collecting and analyzing data. In sum, I have the scientific expertise and the motivation necessary to support this important research effort.

- Suorsa, K. I., Mullins, A. J., Tackett, A. P., Scott, K., Austin, P., Baskin, L., Bernabe, K., Cheng, E., Fried, A., Frimberger, D., Galan, D., Gonzalez, L., Greenfield, S., Kropp, B., Meyer, T., Myer, S., Nokoff, N., Palmer, B., Poppas, D., Paradis, A., Yerkes, E., Wisniewski, A. B., & Mullins, L. L. (2015). Characterizing early psychosocial functioning of parents of children with moderate to severe genital ambiguity due to a disorder of sex development (DSD). Journal of Urology, PMID 26196734.
- Fedele D, Kirk K, Wolfe-Christensen C, Phillips T, Mazur T, Mullins L, Chernausek SD, Wisniewski AB (2010). Primary caregivers of children affected by disorders of sex development (DSD): mental health and caregiver characteristics in the context of genital ambiguity and genitoplasty. Intl J Ped Endocrinol, doi: 10.1155/2010/6906714. PMID 20628508.
- 3. Wolfe-Christensen, C., Fedele, D. A., Kirk, K., Mullins, L. L., Lakshaman, Y., & Wisnieski, A. B. (2014). Caregivers of children with a disorder of sex development: Associations between parenting capacities and psychological distress. *Journal of Pediatric Urology*. *10*, 538-544. doi: 10.1016/j.jpurol.2013.11.016
- 4. Wolfe-Christensen, C., Fedele, D.A., Kirk, K., Phillips, T.M., Mazur, T., Mullins, L.L., Chernausek, S.D.,

Lakshmanan, Y., & Wisniewski, A.B. (2012). Degree of external genital malformation at birth in children with a disorder of sex development and subsequent caregiver distress. *Journal of Urology.* 188, 1596-1600.

B. Positions and Honors

Positions and Employment

Associate Dean for Research, College of Arts and Sciences, Oklahoma State University 2015 -Regents Professor, Oklahoma State University 2014-2013-Vaughn O. Vennerberg Endowed Chair of Psychology, Oklahoma State University 2009-2013 Head, Department of Psychology, Oklahoma State University 2007-2013 Professor, Department of Psychology, Oklahoma State University 2004-2007 Professor of Research, Department of Pediatrics, Oklahoma University Health Sciences Center 2002-2004 Professor, Department of Psychology, Oklahoma State University 1997-Clinical Professor (Adjunct), Department of Psychiatry and Behavioral Sciences, OUHSC 1995-2002 Associate Professor, Department of Psychology, Oklahoma State University 1991-1995 Assistant Professor, Department of Psychology, University of Central Oklahoma 1987-1990 Clinical Psychologist, Consultation/Liaison, Section of Pediatric Psychology, Children's Hospital 1987-1990 Assistant Professor, Department of Psychiatry and Behavioral Sciences, OUHSC 1983-1984 Assistant Professor, Southwestern Oklahoma State University

Other Experience and Professional Memberships

- 2012-2014, Journal of Clinical Psychology in Medical Settings, Associate Editor
- 2006- 2012, Journal of Clinical Psychology in Medical Settings, Editorial Board
- 2006- 2013, Clinical Psychology Review, Editorial Board
- 2005- 2015, Rehabilitation Psychology, Editorial Board
- 1997- Present, Journal of Pediatric Psychology, Editorial Board
- 2003- Present, Journal of Trauma Practice, Editorial Board
- 1995- 2003 Families, Systems, and Health, Editorial Board
- 1986- 1987, Journal of Consulting and Clinical Psychology, Editorial Board
- 1995-2004, Association of Directors of Psychology Training Clinics
- 1995- 2004, Associate Director of Clinical Training, Oklahoma State University
- 1992-1993, President, Division of Academic and Research Psychologists, OPA
- 1983- Present American Psychological Association, Member Divisions 12, 22, 37, 38, 53, and 54 (Fellow)

Honors

2014 Regents Distinguished Research Award, Oklahoma State University

- 2006 Martin P. Levin Mentorship Award, APA & Society of Pediatric Psychology
- 2002 Distinguished Contribution to Psychology Award, Oklahoma Psychological Association
- 1998- Current Advisory Board Member, American Indians into Psychology Program, OSU
- 1994-1995 Board of Directors, Oklahoma Psychological Association
- 1994 Psychology Teacher of the Year, Oklahoma Psychological Association
- 1993 Psychology Teacher of the Year, Oklahoma Psychological Association
- 1993 President, Division of Academic and Research Psychologists, OPA

C. Contribution to Science (selected work from 150+ peer-reviewed publications)

<u>1. Understanding Parent Adjustment to Disorders of Sexual Development.</u> Disorders of Sexual Development are a complex group of congenital medical conditions in which there is discordance between chromosomal, phenotypic, and gonadal sex (Hughes, Houk, Ahmed, & Lee, 2006). Prevalence rates for DSD tend to be low, affecting from 1 in 20,000 to 1 in 5,000 individuals, depending on the underlying etiology (Ostrer, 2000; Vilain, 2009, Wolfe-Christensen et al., 2012). Although these diagnoses are uncommon, the structural and psychological effects are significant for both affected children and their parents (Ahmed et al., 2011). Our research group, including Dr. Amy Wisniewski, are one of a handful in the country who are actively studying

these children and their families. We are currently in year 3 of an NIH-sponsored R01 that seeks to examine medical, surgical, and psychosocial outcomes in parents.

- Suorsa, K. I., Mullins, A. J., Tackett, A. P., Scott, K., Austin, P., Baskin, L., Bernabe, K., Cheng, E., Fried, A., Frimberger, D., Galan, D., Gonzalez, L., Greenfield, S., Kropp, B., Meyer, T., Myer, S., Nokoff, N., Palmer, B., Poppas, D., Paradis, A., Yerkes, E., Wisniewski, A. B., & Mullins, L. L. (in press). Characterizing early psychosocial functioning of parents of children with moderate to severe genital ambiguity due to a disorder of sex development (DSD). *Journal of Urology*.
- 2. Wolfe-Christensen, C., Fedele, D. A., Kirk, K., Mullins, L. L., Lakshaman, Y., & Wisnieski, A. B. (2014). Caregivers of children with a disorder of sex development: Associations between parenting capacities and psychological distress. *Journal of Pediatric Urology*. *10*, 538-544. doi: 10.1016/j.jpurol.2013.11.016
- Wolfe-Christensen, C., Fedele, D.A., Kirk, K., Phillips, T.M., Mazur, T., Mullins, L.L., Chernausek, S.D., Lakshmanan, Y., & Wisniewski, A.B. (2012). Degree of external genital malformation at birth in children with a disorder of sex development and subsequent caregiver distress. *Journal of Urology. 188*, 1596-1600.
- 4. Hullmann, S. E., Fedele, D. A., Wolfe-Christensen, C., Mullins, L. L., & Wisniewski, A. B. (2011), Differences in adjustment by child developmental stage among caregivers of children with disorders of sex development. *International Journal of Pediatric Endocrinology*, *16*, 1-7. Doi:10.1186/1687-9856-2011-16.

2. Psychosocial Outcomes in Pediatric Cancer. These findings have helped to understand psychosocial effects of pediatric cancer, specifically surrounding the experience of illness uncertainty. My most recent contribution to this aspect of pediatric psychology included determining the feasibility and acceptability of an interdisciplinary intervention for mothers of children newly diagnosed with cancer and to estimate effect sizes for the intervention in reducing distress. Specifically, we found that mothers' satisfaction ratings were consistently high, and intervention implementation appeared feasible. Further, we found significant mean effects for the intervention group pre-to-post change on measures of distress. Our work has led to an NIH RO1 funded study to examine this empirically supported clinic-based interdisciplinary intervention targeting the reduction of illness uncertainty in parents of children newly diagnosed with cancer. With this work, we hope to improve psychological and medical outcomes for both the child diagnosed with cancer and his/her parents. My role in this work was to develop the methods and intervention, and then use them to explore the effects of the intervention on of a wide array of psychosocial outcomes. I also trained six researchers in these methods (Drs. Pai, Fedele, Hullmann, Carpentier, Eddington, & Wolfe- Christensen), and all are involved in careers related to pediatric psychology and illness uncertainty science.

- 5. Wiener, L., Viola, A., Kearney, J., Patenaude, AE, Mullins, L. L., Zadeh, S., Sherman-Bien S., Pao, M. (in press) Impact of caregiving for a child with cancer on parental health behaviors, relationship quality and spiritual faith: Do lone parents fare worse? *Journal of Pediatric Oncology Nursing.*
- Tackett, A.P., Cushing, C.C., Surosa, K.I., Mullins, A., Gamwell, K., Mayes, S., Mcnall-Knapp, R., Chaney, J.M, & Mullins, L. L. (2015). Illness uncertainty, global psychological distress, and posttraumatic stress in pediatric cancer: A preliminary examination using a path analysis approach. *Pediatric Psychology.* Advanced access 10/15. 1-10. doi:10.1093/jpepsy/jsv093
- 7. Fedele, D. A., Hullmann, S. E., Chaffin, M., Kenner, C., Fisher, M. J., Kirk, K., ... & Mullins, L. L. (2013). Impact of a parent-based interdisciplinary intervention for mothers on adjustment in children newly diagnosed with cancer. *Journal of Pediatric Psychology*, jst010.
- Mullins, L. L., Fedele, D. A., Chaffin, M., Hullmann, S. E., Kenner, C., Eddington, A. R., ... & McNall-Knapp, R. Y. (2012). A clinic-based interdisciplinary intervention for mothers of children newly diagnosed with cancer: a pilot study. *Journal of Pediatric Psychology*, *37*(10), 1104-1115.

<u>3. Psychosocial Outcomes in other Pediatric Chronic Health Conditions.</u> Over the past 30 years, I have examined the relationship of psychosocial variables on parent, child and familial outcomes across a wide range of pediatric chronic health conditions. Our goal was to help identify those factors that predicted psychosocial outcomes in both youth and their parents. My role in this work was to develop the individual research projects, oversee graduate student implementation of data collection and analysis, and to produce manuscripts. I also trained eight researchers in these methods (Drs. Gillaspy, Pai, Fedele, Rambo, Ryan, Wagner, Van Pelt, & Wolfe- Christensen). All of these previous doctoral students are involved in careers related to further exploring psychological, clinical and social effects of chronic health conditions within the pediatric psychology context.

- 9. Mullins, L. L., & Chaney, J. M. (2013). Introduction to the Special Issue: The Impact of Poverty and Rural Status on Youth With Chronic Health Conditions. *Children's Health Care*, *42*(3), 191-193.
- Hullmann, S. E., Wolfe-Christensen, C., Ryan, J. L., Fedele, D. A., Rambo, P. L., Chaney, J. M., & Mullins, L. L. (2010). Parental overprotection, perceived child vulnerability, and parenting stress: A cross-illness comparison. *Journal of Clinical Psychology in Medical Settings*, *17*(4), 357-365.
- 11. Pai, A. L., Mullins, L. L., Drotar, D., Burant, C., Wagner, J., & Chaney, J. M. (2007). Exploratory and confirmatory factor analysis of the child uncertainty in illness scale among children with chronic illness. *Journal of Pediatric Psychology*, *32*(3), 288-296.
- Fedele, D. A., Kirk, K., Wolfe-Christensen, C., Phillips, T. M., Mazur, T., Mullins, L. L., ... & Wisniewski, A. B. (2010). Primary caregivers of children affected by disorders of sex development: mental health and caregiver characteristics in the context of genital ambiguity and genitoplasty. *International journal of Pediatric Endocrinology*, 2010.

<u>4. Training in Pediatric Psychology.</u> As a field, pediatric psychology has focused considerable efforts on the education and training of students and practitioners. In collaboration with colleagues (Drs. Palermo,Janicke, McQuaid, Mullins, Robins, & Wu), I was asked to join a task Force which adapted the framework proposed by the Competency Benchmarks Work Group on preparing psychologists for health service practice. We defined competencies applicable across training levels ranging from initial practicum training to entry into the professional workforce in pediatric psychology. We documented competencies within 6 cluster areas, including science, professionalism, interpersonal, application, education, and systems. Understanding a care coordination framework, its functions, and its effects on children and families is critical for patients and families themselves, as well as for pediatricians, pediatric medical subspecialists/surgical specialists, and anyone providing services to children and families. In general, optimal outcomes for children and youth, especially those with special health care needs, require interfacing among multiple care systems and individuals, including the following: medical, social, and behavioral professionals; the educational system; payers; medical equipment providers; home care agencies; advocacy groups; needed supportive therapies/services; and families. My role on these projects was to delineate the optimal types of training experiences needed at the graduate training level, and to also outline optimal training in systems perspectives.

- Palermo, T. M., Janicke, D. M., McQuaid, E. L., Mullins, L. L., Robins, P. M., & Wu, Y. P. (2014). Recommendations for training in pediatric psychology: Defining core competencies across training levels. *Journal of Pediatric Psychology*, *39*(9), 965-984.
- 14. Palermo, T. M., Mullins, L. L., Janicke, D. M., McQuaid, E. L., Robins, P. M., & Wu, Y. P. (2014). Response to Cohen, and Steele, Borner, and Roberts. *Journal of Pediatric Psychology*, *39*(9), 998-1000.
- Mayes, S., Wolfe-Christensen, C., Mullins, L. L., & Cain, J. P. (2011). Psychoeducational screening in pediatric Sickle Cell Disease: An evaluation of academic and health concerns in the school environment. *Children's Health Care*, 40(2), 101-115.

Complete List of Published Work in My Bibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/1nyGo5H7w0Bkf/bibliography/49011877/public/?sort=date&direction= descending

D. Selected Research Support Current and Completed Research Support

1R01NR014248-01A Mullins (Co-PI) 9/26/2014 – 7/31/2019

A Clinic-based Interdisciplinary Intervention for Parents for Children with Cancer

The proposed project will yield an empirically supported clinic-based interdisciplinary intervention that targets the reduction of illness uncertainty to prevent and mitigate the adverse psychological impact of pediatric cancer diagnosis and treatment on parents of children newly diagnosed with cancer and their children. The availability of a cancer-specific, uncertainty management intervention will improve psychological and medical outcomes for both the child diagnosed with cancer and his/her parents. Role: Co-PI

5R01HD074579-02 Mullins (Co-PI) 05/01/2014 - 04/30/2018

Short-term Outcomes of Interventions for Reproductive Dysfunction

Information about the benefits and risks of modern approaches to genitoplasty in children with ambiguous genitalia due to Disorders of Sex Development (DSD) is lacking. We proposed to prospectively study short-term cosmetic and urinary function outcomes of children following feminizing or masculinizing surgeries. Additionally, studies of how parents make decisions about if and when to have genitoplasty for their child, as well as the incidence of decisional regret after the fact, are being conducted. Role: Co-PI

R21NR010103-01A2 Mullins (PI) 04/01/08 - 03/30/10

A Clinic-Based Interdisciplinary Intervention for Parents of Children with Cancer The goal of this study was to assess the feasibility and acceptability of implementing a 12-session, clinicbased, interdisciplinary intervention for parents of children newly diagnosed with cancer. Role: PI