

Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Paula Walker King, MD

Date

**PHYSICIAN'S POWER TO PROTECT:
A GRANT PROPOSAL FOR A HEALTH EDUCATION PROGRAM EVALUATION**

By

Paula Walker King, MD
Degree to be awarded: MPH
Executive MPH

Susan Butler, EdD, MCHES Thesis Committee Chair	Date
--	------

Neil Nickelsen, DO, FAAP Committee Member	Date
--	------

Angela Williams, MS Committee Member	Date
---	------

Laura Gaydos, PhD Associate Chair for Academic Affairs, Executive MPH program	Date
--	------

**PHYSICIAN'S POWER TO PROTECT:
A GRANT PROPOSAL FOR A HEALTH EDUCATION PROGRAM EVALUATION**

By
Paula Walker King
M.P.H., Emory University, 2016
M.D., Wayne State University School of Medicine
B.S., Howard University

Thesis Committee Chair: Susan Butler, EdD, MCHES

An abstract of
A Thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements of the degree of
Master of Public Health in the Executive MPH program
2016

Abstract

PHYSICIAN'S POWER TO PROTECT: A GRANT PROPOSAL FOR A HEALTH EDUCATION PROGRAM EVALUATION

By Paula Walker King, MD

The Centers for Disease Control and Prevention estimate that 1 in 4 girls and 1 in 6 boys will be sexually abused before their 18th birthday. A review of the literature reveals that there is limited training for medical professionals on the topic of child sexual abuse in the U.S. and in Canadian graduate medical education models, including the post M.D. educational environment. This thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the **Physician's Power to Protect** health education program. This program was designed for medical professionals to address a gap in specialized and standardized training pertaining to the prevention and detection of child sexual abuse. The **Physician's Power to Protect** curriculum was created in conjunction with Emory University Rollins School of Public Health and VOICE Today, Inc. in response to the findings of a needs assessment that explored child sexual abuse as a public health and safety issue to gain understanding whether there is a need to intervene at the primary medical practice level. The **Physician's Power to Protect** grant proposal is for the evaluation of this curriculum that was recently implemented and taught at the Medical College of Georgia (now Medical College of Georgia at Augusta University) for medical students as they are preparing for their first year of residency. The question that this proposal explores is whether child sexual abuse training should be incorporated in graduate medical education as well as pediatric wellness check-ups and anticipatory guidelines. Ultimately, the goal is for the **Physician's Power to Protect** curriculum to be adopted by medical schools throughout Georgia and across the U.S. and Canada.

**PHYSICIAN'S POWER TO PROTECT:
A GRANT PROPOSAL FOR A HEALTH EDUCATION PROGRAM EVALUATION**

By
Paula Walker King, MD
M.P.H., Emory University, 2016
M.D., Wayne State University School of Medicine
B.S., Howard University

Thesis Committee Chair: Susan Butler, EdD, MCHES

An abstract of
A Thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements of the degree of
Master of Public Health in the Executive MPH program
2016

ACKNOWLEDGEMENTS

I want to thank my loving husband, Sam, and my family for their unwavering support over the past two years. Their love, encouragement and understanding empowered me to successfully complete this program.

Also, I want to thank Dr. Susan Butler, EMPH Program, for her thoughtful guidance during this thesis process. I am forever grateful for her encouragement and support.

With much appreciation, I extend a great big “thank you” to my volunteer expert reviewers: Dr. Suzanne Hemphill, Dr. Beverley Townsend, Dr. Judy Greenlea Taylor, Dr. Floyd Jackson and Dr. Florence Wakoko. Thank you for lending your expertise to the review and editing of this document. I appreciate your insight, thoughtful comments, and support.

Many thanks to Mrs. Angela Williams, Founder of Voice Today, Inc., Dr. Neil Nickelsen and the entire staff of Voice Today, Inc. of Marietta, Georgia; Angela’s passion and determination to break the cycle of silence around child sexual abuse is infectious and inspired me to get involved and champion for the increased rights and protection of our children. I am thankful for Dr. Neil Nickelsen’s commitment to serving as a liaison to community pediatricians and medical schools throughout the state of Georgia.

Last but not least, I am thankful to Dr. Melissa (Moose) Alperin, Chair of the Executive MPH (EMPH) program. Throughout the course of my studies while juggling work/life balance, Moose always reminded me “be good to yourself”. I am thankful to Moose for her words of wisdom, guidance, and support throughout my academic tenure at Emory; and to the many colleagues and friends that I’ve made along the way—it has been a wonderful journey!

Table of Contents

Chapter I: Introduction	1
Problem Statement	1
Purpose of Grant Proposal (Purpose Statement).....	2
Research Questions Addressed by Grant Proposal	3
Overview of Public Health Problem	3
Prevalence	4
Health Care Costs of Child Sexual Abuse and Child Maltreatment	5
Demographic Data	5
Reporting of Child Sexual Abuse	6
Challenges with the Data	7
Barriers to Prevention	8
Significance Statement:	8
Definition of Terms.....	9
Chapter II: Review of the Literature	10
The Role of the Physician in Addressing Child Sexual Abuse	11
Paucity of Standardized Training in the Prevention and Detection of Child Sexual Abuse	12
Current Child Abuse Training in U.S. Graduate Medical Education	14
The SEEK Model.....	15
A Need for Evaluation of Existing Child Abuse Prevention Programs	16
Beyond Pediatrics... The Physician’s Power to Protect	16
Child Abuse Training in Graduate Medical Education in Canada.....	17
Overview of Graduate Medical Education.....	19
Summary of Current Problem and Study Relevance	20
Chapter III: Methodology	22
Evaluation of the Physician’s Power to Protect Program	22
Overview of the Physician’s Power to Protect Curriculum	22
Theoretical Framework for the Physician’s Power to Protect program	24
Proposed Evaluation of the Physician’s Power to Protect Program	27
Program Outcomes at Medical College of Georgia at Augusta University	31
Summary of Grant Funding Announcement.....	32
Medical Education Research Grant by PSI.....	33
Methodology of the Review Process for the Proposal (Funding Criteria).....	33

Extrapolation of Findings	36
Agencies that Fund Similar Programs	36
Budget for Physician’s Power to Protect Program.....	38
External Reviewers for Grant Proposal	39
Chapter IV: Incorporation of Reviewer Comments	40
Chapter V: The Final Version of the Proposal	48
Appendix 1: References	69
Appendix 2: Full Grant Funding Announcement (as published)	76
Appendix 3: Physician’s Power to Protect Pre-Training Survey	86
Appendix 4: Physician’s Power to Protect Post-Training Survey.....	88
Appendix 5: External Reviewer Form	91

Chapter I: Introduction

In this contemporary era of medicine and public health, primary prevention is increasingly touted as an important strategy for averting the occurrence of chronic disease. In these preventative contexts, healthy individuals are counseled and educated about: exercise prescriptions; eating healthy; receiving recommended vaccinations; managing stress; wearing seatbelts and utilizing other safety precautions. It has been repeatedly shown. Primary prevention, when practiced, saves lives, financial resources and improves quality of life (CDC, 2012).

Problem Statement

Given the growing burden of chronic disease that practitioners face when serving populations, wellness and prevention education is vital to the professional development of all medical professionals regardless of their specialty. “A compelling area of need where trauma professionals and other healthcare personnel can make a difference is to employ a public health approach to addressing child trauma exposure (Magruder, Kassam-Adams, Thoresen, & Olf, 2016).” Results from the CDC-Kaiser Permanente Adverse Childhood Experiences (ACE) study indicate that “a range of adverse childhood experiences have long-term health implications in adulthood which include: elevated risk in adulthood for alcoholism, drug abuse, depression, suicide attempts, smoking, obesity, ischemic heart disease, cancer, and chronic obstructive pulmonary disease (CDC, 2012; Anda, et al., 2008; Anda, et al., 2010).” Often neglected in the preventive care approach, to chronic disease, is education and specialized training for health professionals to adequately address and prevent chronic trauma, which can also lead to chronic disease manifestations (ACE study, CDC, 2012).

“Child maltreatment, especially child sexual abuse, is a public health and safety issue that impacts across all aspects of the social-ecological model (Magruder, Kassam-Adams, Thoresen, & Olf, 2016).” Compounding this public health issue is “few primary care-based programs have been developed to train medical professionals in the prevention and detection of child sexual abuse, and most have not been well evaluated (Dubowitz, Feigelman, Lane, & Kim, 2009).”

Purpose of Grant Proposal (Purpose Statement)

The purpose of this grant proposal is to acquire funding to evaluate the *Physician’s Power to Protect* child sexual abuse prevention program.

Physician’s Power to Protect was created in conjunction with Emory University Rollins School of Public Health and VOICE Today, Inc., which is a non-profit organization in Marietta, GA that is committed to breaking the silence and cycle of child sexual abuse through awareness, prevention and healing programs. The *Physician’s Power to Protect* curriculum was developed in response to the findings of a needs assessment that explored “child sexual abuse as a public health issue to gain understanding whether there is a need to intervene at the primary medical practice level” (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014). The goal of the assessment was “to determine who needs to be educated, what type of education is necessary and how child sexual abuse awareness and prevention can be incorporated into pediatric wellness check-ups and anticipatory guidelines” (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014). The assessment indicated that there is a need for prevention education on child sexual abuse at the primary medical practice level (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014).

Physician’s Power to Protect is a program that aims to train medical professionals in the prevention and early detection of child sexual abuse. The program is designed for third and

fourth year medical students as they are preparing for their first year of residency as well as physicians in the post M.D. educational environment to educate them on ways to integrate child sexual abuse prevention into their work (Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014). In February 2016, *Physician's Power to Protect* was taught for the first time at the Medical College of Georgia at Augusta University. The funding acquired from this grant proposal will be used to evaluate the effectiveness of the *Physician's Power to Protect* curriculum. Evaluation is pivotal, especially since the *Physician's Power to Protect* program can address a critical gap in graduate medical education and training..

Research Questions Addressed by Grant Proposal

This thesis grant proposal explores the following research questions:

- Is there a need for child sexual abuse training to be standardized and incorporated in graduate medical education as well as pediatric wellness check-ups and anticipatory guidelines?
- Is the *Physician's Power to Protect* health education program effective in addressing the gap in child abuse prevention training among medical professionals?

Overview of Public Health Problem

Child sexual abuse is defined as “persuading or forcing a child to participate in sexual activities or engage in sexual behaviors (National Society for the Prevention of Cruelty to Children, 2014).” There are many forms of child sexual abuse, including but not limited to “rape, fondling, sexual assault, exposure, voyeurism, and the commercial sexual exploitation of

children (National Sexual Violence Resource Center, 2012).” As demonstrated in the ACE study, the sexual abuse of children and adolescents is a global problem that is potentially damaging to their long-term physical and psychological health (Jenny & Crawford-Jakubiak, 2013).

Prevalence

According to the United States Centers for Disease Control and Prevention, 1 in 4 girls and 1 in 6 boys will be sexually abused before their 18th birthday (Centers for Disease Control and Prevention, 2012). There’s an overall estimation that 1.8 million children and adolescents in the United States are sexual abuse victims (U.S. Dept. of Justice Dru Sjodin National Sex Offender Public Website, 2015).

In Canada, the second most prevalent type of police-reported violence committed against children and youth is sexual assault (Statistics Canada, 2015). In 2008, there were “over 13,600 child and youth victims of sexual offences reported to police in Canada (Statistics Canada, 2015). Over half (59%) of all victims of sexual assault were children and youth under the age of 18 while the rate of sexual assaults against children and youth was 1.5 times higher than the rate for young adult aged 18 to 24 in 2008 (201 per 100,000 children and youth compared to 130 for young adults) (Statistics Canada, 2015).”

“In 2013, an estimated 679,000 children were victims of abuse and neglect in the United States (National Children's Alliance, 2013). Of these children who experienced maltreatment or abuse, nearly 80% suffered neglect; 18% suffered physical abuse; and 9% suffered sexual abuse. According to the Bureau of Justice Statistics’ National Criminal Victimization Survey, in 2012, there were 346,830 reported rapes or sexual assaults of persons 12 years or older in the United States (U.S. Dept. of Justice Dru Sjodin National Sex Offender Public Website, 2015).”

Health Care Costs of Child Sexual Abuse and Child Maltreatment

According to the Centers for Disease Control and Prevention, “the total lifetime estimated financial costs associated with just one year of confirmed cases of child maltreatment (physical abuse, sexual abuse, psychological abuse and neglect) is approximately \$124 billion and rivals the cost of other high profile public health problems (Centers for Disease Control and Prevention, 2012).” The estimated yearly cost of each abused child (direct and indirect is \$63,871.00 (National Children's Alliance, 2013).

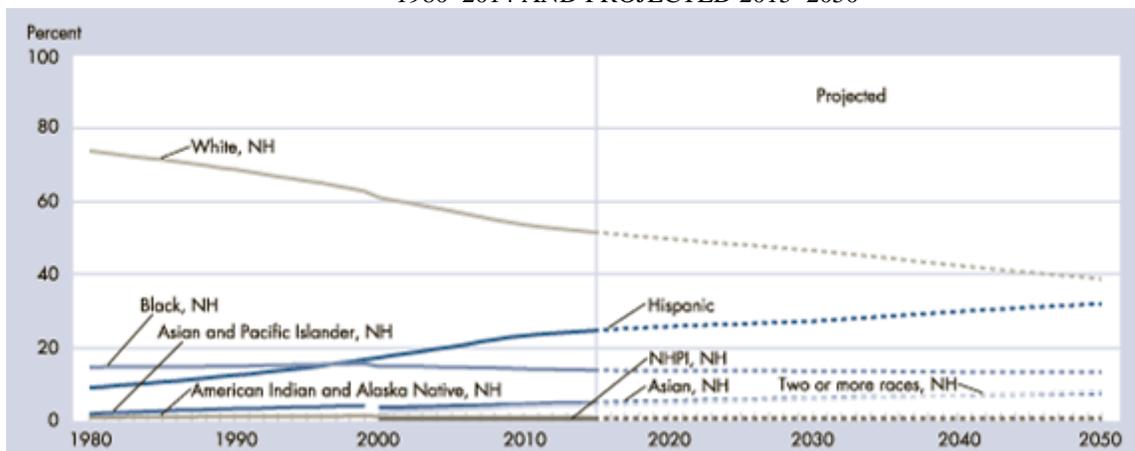
In the state of Georgia alone, there was an estimated 7,000 abused children in 2013. In conjunction, the total yearly cost associated with confirmed cases of child maltreatment in Georgia was \$447,097,000 (National Society for the Prevention of Cruelty to Children, 2014). The estimated long-term costs and losses associated with child maltreatment in Georgia are 858,800,000 (National Society for the Prevention of Cruelty to Children, 2014).

Demographic Data

“In 2011, there were 73.9 million children in the United States, 1.5 million more than in 2000 (Federal Interagency Forum on Child & Family Statistics, 2012).” This number is projected to increase to 101.6 million by 2050 (Federal Interagency Forum on Child & Family Statistics, 2012). In 2011, there were similar numbers of children in each of the following three age groups: 0–5 years (24.3 million), 6–11 years (24.6 million), and 12–17 years (25.1 million). In 2011, children made up 24 percent of the population, down from a peak of 36 percent at the end of the “baby boom” (1964) (Federal Interagency Forum on Child & Family Statistics, 2012). “Children are projected to remain a fairly stable percentage of the total population through 2050, when they are projected to compose 23 percent of the population (Federal Interagency Forum on Child &

Family Statistics, 2012).” Therefore, child sexual abuse potentially affects approximately 23 percent of the U.S. population and is likely the most prevalent health problem that children face (Federal Interagency Forum on Child & Family Statistics, 2012).

PERCENTAGE OF CHILDREN AGES 0–17 IN THE UNITED STATES BY RACE AND HISPANIC ORIGIN, 1980–2014 AND PROJECTED 2015–2050



NOTE: The abbreviation NH refers to non-Hispanic origin. The abbreviation NHPI refers to the Native Hawaiian and Other Pacific Islander population. Each group represents the non-Hispanic population, with the exception of the Hispanic category itself. Race data from 2000 onward are not directly comparable with data from earlier years. Data on race and Hispanic origin are collected separately. Persons of Hispanic origin may be of any race.

SOURCE: U.S. Census Bureau, Population Division

Reporting of Child Sexual Abuse

Child sexual abuse is a severely underreported crime. “People who sexually abuse children are trusted not only by the children they harm; they are often trusted and respected members of their communities (National Sexual Violence Resource Center, 2012).” Often, when children try to tell someone about the abuse they are experiencing, they are ignored, dismissed, or made to feel ashamed. As a result, such “shaming and dismissal can create barriers to children having a voice and being able to tell their stories, which leads to persistent underreporting of this public health crisis (National Sexual Violence Resource Center, 2012).”

Challenges with the Data

Despite some skepticism of reporting methods by various agencies, a review of the literature indicates that there is promising evidence that rates of child sexual abuse, as well as other forms of child maltreatment, are declining since the 1990s as reported to National Child Abuse and Neglect Data System (NCANDS) (U.S. Dept. of Justice Dru Sjodin National Sex Offender Public Website, 2015). However, “estimates of child maltreatment should be interpreted cautiously, as the true extent of child maltreatment is uncertain and widely regarded to be more prevalent than official reporting or community surveys can determine (Sedlak, et al., 2010).” There is equally concerning evidence that the actual rates of child sexual abuse may not be fully known because of significant barriers victims face in reporting crimes. Therefore, rates of child sexual abuse remain high (National Sexual Violence Resource Center, 2012).

“Different research methods used in gathering child sexual abuse data (national population surveys vs. reported cases) as well as evolving definitions make it difficult to arrive at a definitive rate of child sexual abuse. For example, data sets such as those from Child Protective Services agencies may count reported cases of child sexual abuse or only cases that have been substantiated with evidence. Given the underreporting of child sexual abuse and the many challenges in producing evidence and successfully prosecuting this crime, these counts are likely much lower than the actual rate (National Sexual Violence Resource Center, 2012).”

Despite the challenges with the data and the suggestive evidence that child sexual abuse has actually declined over the past decade, the rates of child sexual abuse are still alarmingly high (National Sexual Violence Resource Center, 2012) and the impact is lifelong. The Adverse Childhood Experiences (ACE) study and others over the past 20 years continues to confirm that childhood sexual abuse puts children at significant risk for a wide range of physical,

psychological, and social struggles (National Sexual Violence Resource Center, 2012; CDC, 2012).

Barriers to Prevention

In a recent report, the Centers for Disease Control and Prevention (CDC) identified several barriers in addressing the issue of child sexual abuse and other forms of child maltreatment (Saul, et al., 2014). The three main barriers discussed include:

1. “The need for an ongoing surveillance system to collect data that accurately reflects the true magnitude and severity of the issue”
2. “The majority of systems addressing child sexual abuse and child maltreatment focus on primarily reactive efforts, which indicates there is a great need for preventive, proactive measures”; and
3. “The need for addressing the environment and social context in which the child maltreatment occurs” (Saul, et al., 2014).

Significance Statement:

This thesis confronts the primarily reactive efforts of existing public health surveillance systems and the paucity of training related to child sexual abuse prevention. The *Physician’s Power to Protect* educational program is designed to educate medical professionals on the prevention and early detection of child sexual abuse. However, this recently created and adopted educational program at the Medical College of Georgia at Augusta University needs to be evaluated for effectiveness.

In public health, program evaluation “is a standardized method that’s routinely used to assess the effects of educational programs (Patton, 1997).” This thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the *Physician’s Power to Protect* program. The implementation of a sound evaluation approach will position the study and *Physician’s Power to Protect* for replication in other environments e.g. Canada. Moreover if this proposal is funded, a successful program evaluation of the *Physician’s Power to Protect* program could position this curriculum to be a standard in child sexual abuse training and prevention.

Definition of Terms

The following terms are of significance in this grant proposal because they explain the concept of evaluation, other pertinent terms, and sheds light on the social science research methods that are typically involved in an evaluative process of a health education program.

Program Evaluation - “the systematic collection of information about the activities, characteristics and outcomes of programs to make judgments about the program, improve program effectiveness, and inform decisions about future programming (Patton, 1997).”

Anticipatory Guidelines – “Developmentally appropriate education and guidance given to patients from physicians at regular health wellness visits in order to promote health and prevent disease (McInerney, 2009)

Health education – “Health education is any combination of learning experiences designed to help individuals and communities improve their health, by increasing their knowledge or influencing their attitudes (World Health Organization, 2016).”

RFA – Request for Funding Announcement

ACE study – Adverse Childhood Experience study

Chapter II: Review of the Literature

Over the past 20 years, there has been extraordinary growth in the medical community's knowledge and sensitivity in handling cases of child sexual abuse (Kerns, Terman, & Larson, 1994). Nevertheless, in many ways, “the medical profession, like so many others, is still in the infancy of its understanding of child sexual abuse and how best to deal with it (Kerns, Terman, & Larson, 1994).”

“The medical profession began focusing on the physical abuse of children in the mid-1960s; that attention gradually expanded to include a focus on child sexual abuse (Fontana, 1964).” In 1962, an article titled “The Battered Child Syndrome” was published in the Journal of the American Medical Association, and soon thereafter, two influential books were published: *The Maltreated Child* by Vince Fontana (Fontana, 1964) and *The Battered Child* edited by Ray Helfer and C. Henry Kempe (Helfer & Kemp, 1964). “These publications described for the first time detailed medical aspects of physical child abuse. Prior to this time, there were virtually no materials or training available to medical students and physicians on medically identifying battered children (Kerns, Terman, & Larson, 1994).”

Since these seminal publications on child abuse were published, there has been an unprecedented amount of attention given to child sexual abuse, by the medical community, in recent decades. In 1985, the American Academy of Pediatrics (AAP) established its Committee on Child Abuse and Neglect (Kerns, Terman, & Larson, 1994). In 1991, the committee published its *Guidelines for the Evaluation of Sexual Abuse of Children* for use by primary care

pediatricians (Krugman, Bays, & Chadwick, 1991). In addition to the American Academy of Pediatrics guidelines, the American Medical Association (AMA) published the AMA Diagnostic and Treatment Guidelines on Child Sexual Abuse in 1992 (American Medical Association, 1992), which were identical to the guidelines published earlier by the AAP (Kerns, Terman, & Larson, 1994).

“Despite this increase in attention to child sexual abuse, physician training about reporting and medically evaluating suspected child sexual abuse is inconsistent (Kerns, Terman, & Larson, 1994).” Moreover, the majority of studies on physicians’ comfort and training on the topic of child sexual abuse occurred before the year 2000. Additionally, very few studies have been done to assess physician knowledge of child sexual abuse.

The Role of the Physician in Addressing Child Sexual Abuse

Physicians are important resources in the diagnosis and treatment of abused children (Starling, Heisler, Paulson, & Youmans, 2009). All physicians in the United States are legally required to report suspected abuse and often are called on by courts as expert witnesses (Christian, Professional Education in Child Abuse and Neglect, 2008). Most important, physicians often are the first professionals to encounter a child who may have been abused or neglected. Many physicians, however, have no formal specialized training in child abuse (Starling, Heisler, Paulson, & Youmans, 2009). Typically, physicians become involved in child sexual abuse when they must report suspected abuse or when they are asked to medically evaluate a child who is an alleged victim of abuse (Kerns, Terman, & Larson, 1994). All medical professionals are required under state law to report cases of suspected child abuse, including sexual abuse. The exact legal requirements vary by state (Flango, 1991). The reporting

requirement raises several concerns for pediatricians. Their legal responsibilities as reporters may conflict with their traditional relationship with the family as a unit and with the confidentiality of the doctor-patient relationship (Kerns, Terman, & Larson, 1994).

Paucity of Standardized Training in the Prevention and Detection of Child Sexual Abuse

Medical training in child abuse is inadequate in the United States. Both practicing pediatricians and residents report discomfort with child abuse evaluations. Studies have addressed comfort and training but have not directly assessed child abuse knowledge (Starling, Heisler, Paulson, & Youmans, 2009). A 2006 pilot study that assessed the training and knowledge of residents revealed significant deficits in training and knowledge, but the study was limited to residents in two medical schools (Starling, Heisler, Paulson, & Youmans, 2009). “To find out whether these deficits existed at the national level, a nationally representative sample of program directors and third-year pediatric, emergency medicine (EM), and family medicine (FM) residents in 67 US residency programs were surveyed (Starling, Heisler, Paulson, & Youmans, 2009).” The conclusion of the survey revealed that pediatric programs provide far more training and resources for child abuse education than emergency medicine and family medicine programs (Starling, Heisler, Paulson, & Youmans, 2009). Compared with emergency medicine and family medicine residents, pediatric residents reported receiving more hours of didactic instruction, clinical teaching, and clinical experiences and seeing more abused patients (Starling, Heisler, Paulson, & Youmans, 2009).

“As for specialized knowledge of child sexual abuse, although pediatric programs provided the most training in the 2006 pilot study, the knowledge quiz still challenged many

pediatric residents, whose average score was 73%. Thirty-two percent of these residents misdiagnosed a normal colposcopic examination (a procedure to closely examine the cervix, vagina and vulva) (Starling, Heisler, Paulson, & Youmans, 2009).” Similar deficits have been observed in other studies of medical residents (Starling, Heisler, Paulson, & Youmans, 2009). Dubow et al surveyed 139 pediatric chief residents and found that 50% considered their training in sexual abuse inadequate (Dubow, Giardino, Christian, & Johnson, 2005). “Although many patients present to the emergency department with child abuse–related issues, very few studies have assessed Emergency Medicine residents’ training in abuse (Hyden & Gallagher, 1992).”

As an emergency medicine physician, I can certainly attest that child sexual abuse training was completely absent from my residency program. Not even a single didactic presentation was dedicated to the topic. Given the high probability and likelihood that most cases of sexual assault and sexual violation initially present to the emergency department (ED), this lack of training is baffling and leaves most emergency medicine medical professionals relatively ill prepared for addressing these cases.

“Although the Accreditation Council for Graduate Medical Education (ACGME) requires pediatric residents to learn about child physical and sexual abuse in their emergency and acute illness experience, many programs do not offer a child abuse rotation as a separate educational experience (Narayan, Socolar, & St. Claire, 2006).” The July 1, 2007, ACGME Program Requirements for Graduate Medical Education in Pediatrics does not list child abuse pediatrics among the subspecialty rotations that meet subspecialty training requirements (ACGME Program Requirements for Graduate Medical Education, 2007).

Current Child Abuse Training in U.S. Graduate Medical Education

Research indicates that residents and practicing physicians are not well trained in managing child abuse cases (Starling, Heisler, Paulson, & Youmans, 2009). “There is no national U.S. standard governing the amount and content of child abuse training in pediatric or other residencies (Starling, Heisler, Paulson, & Youmans, 2009).” “Although the Accreditation Council for Graduate Medical Education (ACGME) requires pediatric residents to learn about child physical and sexual abuse in their emergency and acute illness experience, many programs do not offer a child abuse rotation as a separate educational experience (Starling, Heisler, Paulson, & Youmans, 2009).” This is a drawback in current U.S. medical education requirements, especially given that pediatricians are on the front line for investigating potential cases of child sexual abuse. As leaders, pediatricians must establish the importance of this topic in the pediatric education of residents of all specialties. The well-being of children depends on a well-trained and knowledgeable force of physicians who can identify, treat, and ultimately prevent child abuse (Starling, Heisler, Paulson, & Youmans, 2009).

In the 2006 article entitled “Pediatric Residency Training in Child Abuse and Neglect in the United States”, the authors note that “previous studies indicate that physicians often lack knowledge and confidence in addressing child abuse and neglect” (Narayan, Socolar, & St. Claire, 2006). The authors’ goal was to assess the child abuse and neglect curricula in pediatric residency programs as reported by chief residents and to identify levels of preparedness of residents to address child abuse and neglect on graduation (Narayan, Socolar, & St. Claire, 2006). A 28-item survey was sent to chief residents of all 203 Accreditation Council for Graduate Medical Education-accredited pediatric residency programs in the United States from 2004-2005 (Narayan, Socolar, & St. Claire, 2006). Most programs taught didactics on physical

and sexual abuse. The response rate was 71%. The conclusions were that many pediatric residents leave residency with limited (Narayan, Socolar, & St. Claire, 2006). Twenty-eight percent of all pediatric residents leave residency with exposure to < 5 inpatients evaluated for abuse and neglect (Narayan, Socolar, & St. Claire, 2006). Fifty-nine percent of pediatric residency programs offered no mandatory rotation, and 25% offered no rotations at all in child abuse and neglect (Narayan, Socolar, & St. Claire, 2006). Respondents noted the following areas needing improvement in their program's child abuse and neglect training: time scheduled for training (52%), the number of child abuse and neglect patients seen (41%), addition of other components to training (inpatient consults, outpatient clinics, social services experiences, mental health experience, court experience, and/or multidisciplinary team experience) (25%), quality of didactic teaching (15%), expertise of child abuse and neglect providers (14%), and no improvements needed (14%) (Narayan, Socolar, & St. Claire, 2006). The same study demonstrated that providing high-quality didactic teaching of sufficient duration was associated with improved levels of preparedness (Narayan, Socolar, & St. Claire, 2006).

The SEEK Model

In the past, there have been attempts at establishing primary care-based measures for addressing child sexual abuse prevention. The Safe Environment for Every Kid (SEEK) model incorporates psychosocial risk factor screening practice (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011). In one study, "the SEEK model helped residents become more comfortable and competent in screening for and addressing psychosocial risk factors (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011)." Residents reported sustained improvement in their ability to screen and identify problems. Families are more likely to be screened (Feigelman, Dubowitz, Lane,

Grube, & Kim, 2011). This model shows promise to meet the need for training in pediatric primary care (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011).

A Need for Evaluation of Existing Child Abuse Prevention Programs

Effective strategies for preventing child maltreatment are needed. Few primary care-based programs have been developed, and most have not been well evaluated (Dubowitz, Feigelman, Lane, & Kim, 2009). Evaluations have been done to evaluate the efficacy of the SEEK model of pediatric primary care in reducing the occurrence of child maltreatment (Dubowitz, Feigelman, Lane, & Kim, 2009). In one evaluation, the authors concluded that “the SEEK model of pediatric primary care seems promising as a practical strategy for helping prevent child maltreatment (Dubowitz, Feigelman, Lane, & Kim, 2009).” “Replication and additional evaluation of the SEEK model are recommended (Dubowitz, Feigelman, Lane, & Kim, 2009).” Other evaluations reveal that the SEEK model helped residents become more comfortable and competent in screening for and addressing psychosocial risk factors (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011). The benefits were sustained. “Parents viewed the intervention doctors favorably (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011).” “The SEEK model shows promise as a way of helping address major psychosocial problems in pediatric primary care (Feigelman, Dubowitz, Lane, Grube, & Kim, 2011).”

Beyond Pediatrics...The Physician’s Power to Protect

Emergency Medicine residencies must provide more formal training on identification, reporting, and referring abused patients to specialists (Starling, Heisler, Paulson, & Youmans, 2009). Other medical specialists including family physicians must become more comfortable

with treating these patients (Starling, Heisler, Paulson, & Youmans, 2009). Ultimately, residents should receive enough training to ensure that they can accurately identify and report abuse when it is suspected. Studies suggest that current levels of training are not meeting this critical goal. There is also a need for a national child abuse curriculum that can be adapted to any training site. (Starling, Heisler, Paulson, & Youmans, 2009).

Child Abuse Training in Graduate Medical Education in Canada

Child maltreatment is just as prevalent in Canadian society (Ward M. , et al., 2004). Using country-specific national methods, it was estimated that in 2006, “children in the U.S. experienced maltreatment at a rate of 17.1 per 1,000 children in the general population, while Canadian rates of substantiated child maltreatment in 2008 were estimated at 14.1 per 1,000 (PHAC, 2010; Sedlak et al., 2010).” The Canadian Incidence Study of Reported Abuse and Neglect estimated that “2.1% of Canadian children are the subjects of child maltreatment investigations and 0.97% are confirmed to have suffered maltreatment (Trocme, et al., 2001).” This is likely an underestimate of the true incidence as many cases go unreported. Previous retrospective data from the Ontario Health supplement found that “33% of males and 27% of females reported experiences of physical/sexual abuse during childhood (MacMillan, et al., 1997).”

“The Badgley report (1984) is the only national study ever conducted in Canada on child sex abuse (Sexual Offenses Against Children in Canada, 1984).” The author reported on survey results from adults and indicated that 54% of girls and 32% of boys were sexually abused before the age of 18 (Sexual Offenses Against Children in Canada, 1984).

Like in the U.S., physician knowledge and training in child protection have been questioned in Canada also (Ward M. , et al., 2004). In 2004, a landmark study examined the experience, perceived adequacy of training perceived competency of Canadian pediatric residents in child protection (Ward M. , et al., 2004). “Structured questionnaires were sent to child protection program directors (CPPDs), pediatric program directors (PPDs) and pediatric residents at the 16 Canadian pediatric academic centers (Ward M. , et al., 2004). Responses were obtained from 15 of 16 CPPDs, all 16 PPDs, and 190 of 348 (54.6%) residents (Ward M. , et al., 2004).” The study revealed that “there is child protection specialists affiliated with all Canadian pediatric residency programs, and all programs reported some form of teaching on child maltreatment (Ward M. , et al., 2004).” Consequently, “residents’ self-rating of competency was positively associated with number of years of training and number of cases of maltreatment seen (Ward M. , et al., 2004).” Almost all residents (92%) felt that they needed further training in child protection, including 85% of graduating residents (Ward M. , et al., 2004). Some of the Canadian residents (16.4%) did not anticipate dealing with child protection cases as practicing pediatricians (Ward M. , et al., 2004). Even senior pediatric residents reported seeing few cases of suspected child maltreatment (Ward M. , et al., 2004). This is particularly concerning given that residents’ perceived competency in evaluating and managing cases of maltreatment was related to the number of cases of maltreatment encountered in their training (Ward M. , et al., 2004). Further, a previous study demonstrated that the likelihood of reporting maltreatment among practicing physicians was related to the amount of training that they had received in this field (Lawrence & Brannen, 2000). An American study of residents’ knowledge of child maltreatment also found the scores to be positively correlated with the residents’ reports of exposure to child abuse instruction in their training programs (Woolf, et al., 1988).

Medical Educators across Canada are presently discussing whether the current 4-year residency programs adequately prepare pediatricians for their future careers (Lieberman & Hilliard, 2006). Existing studies carried out in the USA have repeatedly shown areas of weakness in residency training, but there are no studies looking at the overall adequacy of training across Canada (Lieberman & Hilliard, 2006).

Overview of Graduate Medical Education

Accreditation of U.S. medical schools is obtained through the Liaison Committee on Medical Education (LCME) (Christian, Professional Education in Child Abuse and Neglect, 2008). Accreditation by the LCME is required for medical schools to receive federal grants for education, and the majority of state licensing boards require U.S. medical schools to be accredited by the LCME (Christian, Professional Education in Child Abuse and Neglect, 2008).

In most recent revisions of the accreditation standards, the LCME states, “The curriculum must prepare students for their role in addressing the medical consequences of common societal problems, for example, providing instruction in the diagnosis, prevention, appropriate reporting, and treatment of violence and abuse (Liaison Committee on Medical Education Functions and Structure of a Medical School: Standards of Accreditation of Medical Programs Leading to the MD degree, 2006).

Although the standards for medical education explicitly include a requirement for education in social issues such as child abuse, the responsibility for curriculum development rests with medical school faculty and is not specifically dictated by accrediting bodies (Christian, Professional Education in Child Abuse and Neglect, 2008). As such, curricula in child protection

vary by leadership, determination, and capacity at each medical school (Krugman & Cohn, 2001).

Over the past decade, recommendations for curriculum development in interpersonal violence and child sexual abuse have been proposed by academicians, and initial steps have been taken to standardize curricula across medical schools (Sarkin, 2001). For example, the Council on Medical Student Education in Pediatrics (COMSEP) is an organization of U.S. and Canadian educators with administrative responsibility for undergraduate medical education in pediatrics, which promotes the development and evaluation of curricula and educational resources through interinstitutional collaboration (Christian, Professional Education in Child Abuse and Neglect, 2008). Despite these efforts and the work of many dedicated physicians who teach medical students about child maltreatment, there are few data on the quantity and quality of medical student education in child sexual abuse (Christian, Professional Education in Child Abuse and Neglect, 2008).

Summary of Current Problem and Study Relevance

A review of the literature reveals that there is limited training for medical professionals on the topic of child sexual abuse in the U.S. and in Canadian graduate medical education models, including the post M.D. educational environment. Therefore, effective strategies for preventing child maltreatment are needed. Few primary care-based programs have been developed, and most have not been well evaluated (Dubowitz, Feigelman, Lane, & Kim, 2009). The *Physician's Power to Protect* program has been designed for medical professionals to address this gap in specialized and standardized training pertaining to the prevention and detection of child sexual abuse. Given the existing data, there is a need for such a program to be

implemented in the existing graduate medical education landscape. However prior to implementation, the *Physician's Power to Protect* program should be fully evaluated. This thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the *Physician's Power to Protect* program in preparedness for its integration and adoption by medical schools throughout Georgia and across the U.S. and Canada.

Chapter III: Methodology

Evaluation of the Physician's Power to Protect Program

According to the Facilitator Guide for the *Physician's Power to Protect* program, there are two types of evaluation plans for this program, that were devised at its inception, and will be implemented in this proposal as well: a *performance evaluation* that assesses behavior change as a result of the program, and a *learning evaluation* that assesses outcomes for each session or module. Assessment for this educational program consists of informal and formal assessments that are completed during and after each didactic session. By definition, “informal assessment is a technique that can be incorporated into classroom activities which do not provide a comparison to a broader group, and formal assessment is a preplanned assessment which provides a larger picture of learning outcomes and comparison to a broader group or predetermined standards” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). At the inception of the *Physician's Power to Protect* program, an evaluation of the curriculum was proposed which will be discussed in greater detail later on in this chapter of the grant proposal. Currently, pre- and post-training surveys are used as evaluation tools for the *Physician's Power to Protect* program (Appendix 3 and Appendix 4).

Overview of the Physician's Power to Protect Curriculum

The *Physician's Power to Protect* curriculum consists of a Facilitator's Guide and Student Toolkit, which is a separate booklet filled with supplemental information to be provided to each student (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

There are two overall goals of the *Physician's Power to Protect* curriculum. The first is “to equip third and fourth year medical students with the knowledge and skills to detect and prevent child sexual abuse (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).” The second is for students “to be able to describe a comprehensive outline guiding the process of detecting, identifying, communicating and reporting a child sexual abuse case (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).” According to the Facilitator’s Guide, the *Physician’s Power to Protect* curriculum consists of five (5) lessons:

1. Child Sexual Abuse: The Basics
2. Detecting Child Sexual Abuse
3. Communicating Child Sexual Abuse
4. Reporting and the Legal System
5. Providing Resources

Additionally, there are three (3) objectives identified in the guide:

1. At least 80% of the students will be able to identify and detect child sexual abuse
2. At least 80% of the students will be able to appropriately communicate with pediatric patients and their families regarding child sexual abuse
3. At least 80% of the students will be able to identify the appropriate disclosure and reporting procedure when handling potential child sexual abuse cases.

The *Physician's Power to Protect* curriculum is intended to be offered as part of the lecture material and modules during the third and fourth year of medical school (Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014). Likewise, the curriculum can be adapted to the post M.D. educational environment to include residency programs and the primary medical practice level. Recently, the curriculum was successfully implemented at the Medical College of Georgia at Augusta University.

Theoretical Framework for the Physician's Power to Protect program

The Social Cognitive Theory and Problem Based Learning Theory were used to inform the design of the *Physician's Power to Protect* curriculum (Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014).

Social Cognitive Theory

“The Social Cognitive Theory is widely used in the field of public health to describe how individuals interact with their environments, and vice versa, and how these interactions shape behavior” (Glanz, Rimer, & Viswanath, *Health Behavior and Education*, 2008). “This concept known as reciprocal determinism was a key factor in the decision to use Social Cognitive Theory in the creation of the *Physician's Power to Protect* curriculum” (Glanz, Rimer & Viswanath, 2008; Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014). The following Social Cognitive Theory constructs are used in the *Physician's Power to Protect* program: self-efficacy; collective efficacy; outcome expectation; facilitation; and observational learning (Glanz, Rimer & Viswanath, 2008; Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014). Below is a brief description of

these constructs, as described in the *Physician's Power to Protect* Facilitator's Guide, and how they are used in each lesson plan of the *Physician's Power to Protect* curriculum.

Self-efficacy: “Defined as the beliefs about personal ability to perform a certain behavior” (Glanz, Rimer, & Viswanath, Health Behavior and Education, 2008); “increasing students’ self-efficacy to be able to detect and prevent child sexual abuse was incorporated into every lesson. Beginning with lesson one by introducing students to the nature of the issue (child sexual abuse) and ending with lesson five by providing students with resources to refer child sexual abuse victims to; in sum, the entire curriculum seeks to build knowledge and skills that should build students’ confidence in communicating about and better managing this public health issue” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Collective efficacy: “Similar to self-efficacy, this is the belief about the ability of a group to perform certain actions” (Glanz, Rimer, & Viswanath, Health Behavior and Education, 2008). “By allowing students to communicate and solve problems together, as a cohort they will learn the skills and be able to have the confidence to detect child sexual abuse in their work (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). Lesson 3, of the *Physician's Power to Protect* curriculum gives students the opportunity to discuss important communication techniques that they feel may be useful in their work” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Outcome Expectations: “These are the beliefs and values about the consequences of a behavior” (Glanz, Rimer, & Viswanath, Health Behavior and Education, 2008). “If an individual believes that performing a certain behavior will result in positive consequences, he or

she will engage in that behavior” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). “This construct was incorporated into Lesson 4 when students are taught about the consequences of not reporting a suspected case of child sex abuse” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Facilitation: “It is believed that if a person is provided with tools or resources that make it easier to change a behavior, he or she will be more likely to actually change their behavior” (Glanz, Rimer & Viswanath, 2008; Duan, Green, Mehrotra, Odani, & Rogers, Physician’s Power to Protect: Facilitator’s Guide, 2014). In the *Physician’s Power to Protect* curriculum, “students are provided with a list of common signs and symptoms of child sexual abuse as well as available resources for child sexual abuse victims” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). “Giving these resources to students will make it easier for them to know both how to detect child sexual abuse and where to send patients to receive the appropriate help and support” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Observational Learning: “involves the notion that an individual can learn a behavior by watching someone else” (Glanz, Rimer, & Viswanath, Health Behavior and Education, 2008). “In the *Physician’s Power to Protect* program, attendees have the opportunity to watch their peers respond to hypothetical scenarios that mirror real life clinical scenarios, which should give students new ideas and perspectives on how they might address a similar situation themselves” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). This construct is utilized in Lesson 3 (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Problem-Based Learning Theory

Problem-based Learning is a “pedagogical approach and curriculum design methodology that allows for hands-on, active learning centered on the investigation and resolution of real world problems” (Problem Based Learning, 2015). “Problem-based learning is applied in educational curricula through open-ended problems that can be solved in a group with no one “right” answer; students work as problem solvers in small collaborative groups” (Problem Based Learning, 2015). This learning theory has been applied to the *Physician’s Power to Protect* curriculum for several group activities throughout the lesson plans (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). “The lessons engage students and allow them to work on specific activities such as a sample case study to detect signs and symptoms of child sexual abuse, designing a sample conversation between the doctor and child’s caregiver discussing child sexual abuse, and both small and large group discussion activities incorporated in all of the lesson plans” (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

Proposed Evaluation of the Physician’s Power to Protect Program

As part of the evaluation process, pre- and post-assessment questionnaires will be administered to assess the percentage of participants using the curriculum to increase detection of the signs and symptoms of child sexual abuse (See Appendix 3 and Appendix 4).

When the *Physician’s Power to Protect* program was conceptualized, a curriculum evaluation was developed and included in the Facilitator’s Guide. This same curriculum evaluation methodology is what’s proposed for the program evaluation of the *Physician’s Power to Protect* program in this thesis grant proposal. The curriculum evaluation is as follows:

Performance Objective: By the end of the program, at least 80% of the students will be able to identify and detect child sexual abuse

Lesson	Behavior	Assessment Method(s)	Assessment Types
1	Practice self-awareness of the overall problem of child sexual abuse	Baseline knowledge quiz Homework Assignment	Informal
2	Practice detecting signs and symptoms of child sexual abuse	Baseline knowledge case study Quiz at end of lesson	Informal Formal or Informal (instructor's discretion)

Performance Objective: By the end of the program, at least 80% of the students will be able to appropriately communicate with pediatric patients and their families regarding child sexual abuse

Lesson	Behavior	Assessment Method(s)	Assessment Types
3	Practice communicating through brainstorming possible questions to ask patients and hypothetical speeches with caregivers	Report out	Informal

Performance Objective: By the end of the program, at least 80% of the students will be able to identify the appropriate disclosure and reporting procedure when handling potential child sexual abuse cases

Lesson	Behavior	Assessment Method(s)	Assessment Types
4	Practice reporting child sexual abuse	Report out Quiz	Informal Formal

5	Practice selecting appropriate resource for patients through discussion and presentation	Report out Quiz at end of session Students' evaluation	Informal Formal or Informal (instructor's discretion)
----------	---	---	--

Source: Physician's Power to Protect Facilitator's Guide (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014)

Curriculum Evaluation by Lesson for the Physician's Power to Protect program

Lesson 1 – Child Sexual Abuse: The Basics

Learning Objectives	Tasks and Activities	Form of Assessment	Type of Assessment
1. Recognize the magnitude of the social problem that child sexual abuse has created in the United States	Activity one	Quiz	Informal
	Homework assignment	Homework assignment	
2. Define child sexual abuse in his/her own words	Activity two	Report out	Informal

Lesson 2 – Detecting Child Sexual Abuse

Learning Objectives	Tasks and Activities	Form of Assessment	Type of Assessment
1. Identify at least six behavioral signs and six physical signs of child sexual abuse	Initial case study and discussion afterwards; final quiz	Group activity	Informal
		Report out	Formal
		Quiz	
2. Summarize and explain the major steps provided in the “checklist” that they were given to take on rounds	Look over the checklist and summarize in own words; final quiz	Group activity	Informal
		Quiz	Formal

Lesson 3 – Communicating Child Sexual Abuse

Learning Objectives	Tasks and Activities	Form of Assessment	Type of Assessment
1. Identify the appropriate techniques, including language, to use when communicating with children and caregivers regarding child sexual abuse	Activity one	Report out	Informal
2. Increase self-efficacy in regards to communicating about child sexual abuse	Activity two	Brainstorming	Informal
		Report out	

Lesson 4 – Reporting and the Legal System

Learning Objectives	Tasks and Activities	Form of Assessment	Type of Assessment
---------------------	----------------------	--------------------	--------------------

1. Summarize the method of reporting child sexual abuse	Activity one	Report out	Informal
	Activity three	Quiz	Formal
2. Identify what the responsibilities of a physician/clinician are in reporting child sexual abuse	Activity two	Discussion	Informal

Lesson 5 – Providing Resources

Learning Objectives	Tasks and Activities	Form of Assessment	Type of Assessment
1. Name at least 3 organizations who can help a child who has experienced sexual abuse	Handout 5.2	Quiz	Formal or Informal (at instructor's discretion)
2. Describe how the previously named organizations can help a child who experienced sexual abuse	Group discussion	Report out	Formal or
	Presentation	Quiz	Informal (at
	Handout 5.2		instructor's discretion)

Source: Physician's Power to Protect Facilitator's Guide, (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014)

Program Outcomes at Medical College of Georgia at Augusta University

Twenty-three (23) physicians-in-training at the Medical College of Georgia at Augusta University were in the pilot class for the *Physician's Power to Protect* program. After the 5-hour training concluded, based on the post-assessment of the program:

- 83% of the students felt confident in their ability to identify and detect child sexual abuse, and learned more information than they previously knew about the subject

- 90% of the students felt confident that they were able to appropriately communicate with pediatric patients and 90% of the students felt confident talking to a caregiver/pediatric patients' families regarding child sexual abuse and
- 92% of the students were able to describe the appropriate disclosure and reporting procedure for handling potential child sexual abuse cases.

Additionally, students developed a 30 second elevator pitch (response) when taking a disclosure from a victim of child sexual abuse

Summary of Grant Funding Announcement

This Thesis grant proposal has been crafted in response to a funding announcement from the Physician Services, Incorporated Foundation that addresses medical education research like the evaluation of the *Physician's Power to Protect* program, and is designed to assess through research the post M.D. educational environment, such as curricula, methods and teaching resources.

The PSI Foundation (Physician Services, Incorporated) recognizes that “research within this area may involve teams that include non-medical researchers and consultants. The Health Research grants are intended to only support projects that evaluate curriculum, methods and teaching resources. The eligible types of research are clinical research, medical education research and health systems research” (Grant Funding Announcement; See Appendix 1).

Medical Education Research Grant by PSI

This Thesis grant proposal involves medical education research, which focuses on a project designed to assess through research the post M.D. educational environment, such as curricula, methods and teaching resources. In particular, this thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the *Physician's Power to Protect* program, which was designed for medical professionals to address a gap in specialized and standardized training pertaining to the prevention and detection of child sexual abuse.

The PSI Foundation's new online application system is now in use for Health Research Grant applications. The PSI Foundation no longer has deadlines. You may submit an application at any time. Projects intended to create and/or develop curriculum, educational programs or tools will not be considered by PSI. Also, any costs attributed to the creation and/or development of curriculum, educational programs or tools will not be considered.

Methodology of the Review Process for the Proposal (Funding Criteria)

According to the funding announcement (Appendix 1), research applications will be assessed on an equal weighting basis of scientific merit and clinical relevance. Please note that when all other considerations are equal, the research types will be funded in the following order of priority:

1. Clinical research
2. Medical education research at the post-M.D. level
3. Health systems research

The following questions represent the criteria that will be considered by the Grants Committee in assessing an application (as applicable to the specifics of the research):

1. Is the proposal within the interests and objectives of the Foundation, or is it a proposal which is more appropriate for support by another granting agency?

This proposal given its emphasis on medical education research and program evaluation is within the interests and objectives of the Foundation.

2. Does the proposed study represent truly innovative work?

Yes; a review of the literature revealed that there is limited training for medical professionals on the topic of child sexual abuse in the U.S. and in Canadian graduate medical education models, including the post M.D. educational environment. Few primary care-based programs have been developed, and most have not been well evaluated (Dubowitz, Feigelman, Lane, & Kim, 2009).

3. Will the proposal add significantly to the state of knowledge?

Since there is a lack of specialized and standardized training in the prevention and detection of child sexual abuse for physicians, a well evaluated Physician's Power to Protect program will add significantly to the state of the knowledge.

4. Is there a strong knowledge translation component/plan?

Yes.

5. Is the investigator fully aware of the present state of knowledge in the area to be investigated? Does the application demonstrate a comprehensive literature review was carried out?

Yes. A comprehensive literature review was executed in relation to this grant thesis proposal.

6. To what extent could the research project findings strengthen clinical care and improve

the health outcomes of patients?

The project findings can strengthen clinical care and potentially lead to prevention and detection of potential child sex abuse cases. The American Academy of Pediatrics recommends that physicians provide information about sexual abuse prevention as part of anticipatory guidance and routine preventative care (Thomas, Flaherty, & Binns, 2004). Unfortunately, few studies have examined programs aimed at childcare professionals, although many researchers have acknowledged the need for this type of work, particularly with physicians (Rheingold, et al., 2014).

7. Are the aims of the project feasible and can they be achieved realistically within the time frame outlined in the application? Are the objectives of the project testable and, if the objectives are stated in the form of a hypothesis, is the time reference reasonable with respect to the realization of the testing of this hypothesis?

The objectives of the project are testable. The aims of the Physician's Power to Protect program evaluation are feasible within the time frame outlined in this thesis proposal.

8. Are the research methods appropriate for the objectives of the study? Is the methodology of the proposal sound? The application must include sufficient detail to provide a full understanding of the steps/protocols. Is the sample size statistically justified and feasible?

Yes; the research methods are appropriate for the objectives of the program evaluation.

9. Is the principal investigator qualified and is the environment in which he or she works satisfactory to carry out the project?

Yes. Both the American-based and Canadian-based investigators are qualified to carry out the project.

10. Are the personnel and equipment proposed adequate to carry out the project? Are all budget items sufficiently justified in the application? Is the budget feasible in relation to the objectives of the study?

All budget items are sufficiently justified in the application.

11. Will the project have any impact on reducing health costs?

This project will potentially curb the incidence of child sexual abuse and reduce health care costs associated with child sexual abuse.

12. What is the relevance of the project to the provincial health context?

This project is relevant to the provincial health context as well as U.S. based health care scenarios.

13. Are there alternative ways to address the clinical problem being addressed by the research?

The review of the literature reveals that alternative and less effective ways have been attempted to address the training gap in physicians, as it relates to child sexual abuse. However, the gap in knowledge, competence and confidence in handling child sex abuse cases persists.

Extrapolation of Findings

The scientific rigor of this program evaluation could position this study for replication in other environments beyond the U.S., such as Canadian medical schools.

Agencies that Fund Similar Programs

Health education research is often addressed and funded by national research organizations as well as smaller community foundations. Some examples of potential funders include:

- National Institutes of Health (NIH)
- Health Resources and Services Administration (HRSA)
- Private Foundations
- State health departments
- Department of Health and Human Services

I selected this particular grant announcement because of its emphasis on medical education research and the post M.D. educational environment. Also, the opportunity to impact graduate medical education in both the U.S. and Canada was also desirable to address a training gap among medical professionals in both countries.

Budget for Physician's Power to Protect Program

PHYSICIAN'S POWER TO PROTECT CHILD SEXUAL ABUSE PREVENTION PROGRAM				
PROGRAM ALLOCATION	Phase I	Phase II	Phase III	COST
	Jan 2016 - Jan 2017	2017-2018	2018-2019	3-Year Plan
Total Physicians Offices Served	10	20	40	40
Total Physicians Served	50	100	200	200
Total Children Served	150,000	300,000	600,000	600,000
Operations				
Staff	\$195,000	\$385,000	\$462,000	\$1,042,000
Training				
PPP Curriculum Printing	\$12,000	\$12,000	\$13,000	\$37,000
Training Event Costs	\$10,000	\$15,000	\$25,000	\$50,000
Continuing Education Accreditation	\$10,000	\$5,000	\$5,000	\$20,000
CEU Module Training & Certification	\$12,000	\$7,500	\$8,500	\$28,000
Caregiver & Child Prevention Resources				
Digital Production	\$50,000	\$10,000	\$10,000	\$70,000
Collateral Materials	\$88,000	\$176,000	\$352,000	\$616,000
Office Kiosk / Production	\$50,000	\$100,000	\$100,000	\$250,000
PPP Mobile Application	\$50,000	\$7,500	\$7,500	\$65,000
PPP Website	\$7,000	\$5,000	\$5,000	\$17,000
Marketing	\$50,000	\$50,000	\$50,000	\$150,000
Research and Development	\$200,000	\$200,000	\$200,000	\$600,000
Professional Consulting Policy Reform	\$100,000	\$50,000	\$50,000	\$200,000
Rent and Utilities	\$110,000	\$129,000	\$151,000	\$390,000
Total Program Cost	\$944,000	\$1,152,000	\$1,439,000	\$3,535,000
Estimated Yearly Cost of Child Sexual Abuse	\$450,000,000	\$450,000,000	\$450,000,000	\$1,350,000,000
Proposed Healthcare Professional Reimbursement	\$75	\$75	\$75	\$75
Cost Per Child	\$6.29	\$3.84	\$2.40	\$5.89
Cost Per Well Check	\$81.29	\$78.84	\$77.40	\$80.89
Yearly Cost of Abused Child				\$63,871

External Reviewers for Grant Proposal

Five (5) highly skilled and trained external reviewers were selected to review this grant proposal. They are listed in the table below. Each external reviewer was given ample time to review the grant proposal in its entirety. Each reviewer was provided a form that asked him/her to comment on five written prompts on a Likert scale. Additionally, each reviewer was asked to provide comments in their copy of the proposal using the “track changes” function in Microsoft Word. Reviews were not shared among reviewers. Instead, the reviews were provided individually. The information was returned electronically to paula.dorita.walker@emory.edu.

<p>Judy Greenlea Taylor, DDS, MPH, FICD Secretary, Board of Public Health, Georgia Department of Public Health 2 Peachtree Street, NW, 15th Floor Atlanta, Georgia 30303-3186</p>
<p>Suzanne S. Hemphill-Dickson, PhD Director of Public Health ASHLIN Management Group 2200 Century Center Dr # 980 Atlanta, GA 30345</p>
<p>Floyd Jackson, PhD Professor Columbus State University 4225 University Ave. Columbus, GA 31907</p>
<p>Beverley A. Townsend, MD, MBA, FAAFP <i>District Health Director</i> District Administration / West Central Health District Lead Agency – Columbus Department of Public Health 2100 Comer Avenue Columbus, Georgia 31904</p>
<p>Florence Wakoko, PhD Associate Professor Columbus State University 4225 University Ave. Columbus, GA 31907</p>

Chapter IV: Incorporation of Reviewer Comments

I am especially appreciative of the five (5) external reviewers who graciously accepted the invitation to review this proposal and contribute to its overall improvement.

Reviewer 1 answered “**strongly agree**” to the following statements: The proposal is responsive to the RFA (request for applications); The proposal is well thought out and theoretically sound; The PI makes a compelling case that the proposed research is necessary; The PI makes a compelling case that she can accomplish what is proposed; and The proposed research is innovative and sets the groundwork for future work in this area.

Reviewer 1 comments about suggestions/improvements that can be made:

Comment 1: “Paula looks really good. I didn't put this on the form but change the school to Medical College of Georgia at Augusta University versus Georgia Regents University.”

Response to comment 1: Throughout the document, including the abstract and introduction, the correct, updated name of the university was inserted (Medical College of Georgia at Augusta University).

Comment 2: “The PI nicely focused on noting timeline and goals that were specific, attainable and quantifiable. As a recommendation, the PI could elaborate on how the results will be comparatively quantified (i.e. an effectiveness indicator for each behavior). Sample – Percentage of participants using the curriculum to detect signs and symptoms of child sexual abuse as measured by identified assessment method.”

Response to comment 2: Pre- and post-assessments were included in the program evaluation to obtain the percentage of participants using the curriculum to detect signs and symptoms of child sexual abuse as measured by these assessment methods.

Reviewer 2 answered “**agree**” to the following statements: The proposal is responsive to the RFA (request for applications); The proposal is well thought out and theoretically sound; The PI makes a compelling case that the proposed research is necessary; The PI makes a compelling case that she can accomplish what is proposed; and The proposed research is innovative and sets the groundwork for future work in this area.

Reviewer 2 comments about suggestions/improvements that can be made:

Comment 1: “Look for references for more recent publications.”

Response to comment 1: The seminal works on studies assessing the knowledge, attitudes and competency, of physician residents, regarding preventing and detecting child sexual abuse were primarily done before the year 2000. However, in response to Reviewer 2’s comment, contemporary studies were included in the review of literature in chapter II.

Comment 2: “Add a bit more clarity in Chapters I, II and III.”

Response to comment 2: The introduction in Chapter I was re-written to portray a shared context between medicine and public health as it relates to primary prevention. Subsequently, a crisper, sharper overview of this public health problem was included in Chapter I bolstered by supporting statistics and data.

Comment 3: “Make sure the abstract “wording” aligns.

Response to comment 3: Nebulous and impertinent information was removed from the abstract.

In response to this comment, the abstract wording was made to be more concise and a couple of sentences were combined.

Comment 4: “Make sure all claims are substantiated”.

Response to comment 4: All unsubstantiated claims were removed from Chapter I of this thesis grant proposal.

Comment 5: “Where curriculum has been implemented, offer the proof outcomes.”

Response to comment 5: As a result of this comment, program outcomes from the Medical College of Georgia at Augusta University were included in Chapter III of this proposal.

Comment 6: “Recent research if available.”

Response to comment 6: Recent research (2006-2016) was incorporated into this grant proposal where available.

Comment 7: “This document could potentially add to the body of knowledge regarding “child sexual abuse and behaviors.”

Response to comment 7: This quotation was duly noted and included as a supporting statement justifying the innovation of this program proposal.

Reviewer 3 answered “**strongly agree**” to the following statements: The proposal is responsive to the RFA (request for applications); The proposal is well thought out and theoretically sound; The PI makes a compelling case that the proposed research is necessary; and The proposed research is innovative and sets the groundwork for future work in this area.

Reviewer 3 answered “neutral” to the following statement: The PI makes a compelling case that she can accomplish what is proposed.

Reviewer 3 comments about suggestions/improvements that can be made:

Comment 1: “The proposal is responsive to the RFA. The PI could emphasize more the broader impacts since the proposal address a crisis in child abuse which is pretty much ignored.”

Response to comment 1: The introduction in Chapter I was re-written to portray a shared context between medicine and public health as it relates to primary prevention, emphasizing the broader impacts of child sexual abuse.

Comment 2: “Perhaps the inclusion of some references that are less than 5 years old would help, but there might not be any work that is under 5 years that addresses the proposed work.

Response to comment 2: Recent research (2011-2016) was incorporated into this grant proposal where available.

Comment 3: “The PI makes a very compelling case for the research. There only needs to be an emphasis on the broader impacts.

Response to comment 3: The broader impacts were included in the Introduction in Chapter I.

Comment 4: “The PI should mention how the work will be accomplished and what resources will be required. Perhaps the reason being this is a thesis proposal.”

Response to comment 4: A budget was included in this proposal depicting required resources and the evaluation plan was elaborated in Chapter 3.

Comment 5: “The PI has presented a proposal which would address an area that has been overlooked and ignored for a very long time. It is obvious that this work has many moving parts and would lay the groundwork for many years into the future.”

Response to comment 5: This quotation was duly noted and included as a supporting statement justifying the innovation of this program proposal.

Reviewer 4 answered “**agree**” to the following statements: The proposal is responsive to the RFA (request for applications); and the proposal is well thought out and theoretically sound. Reviewer 4 answered “**strongly agree**” to the following statements: The PI makes a compelling case that the proposed research is necessary; The PI makes a compelling case that she can accomplish what is proposed; and The proposed research is innovative and sets the groundwork for future work in this area. *No comments were included on Reviewer 4’s form.*

Reviewer 5 answered “**strongly agree**” to the following statement: The proposal is responsive to the RFA (request for applications); The PI makes a compelling case that she can accomplish what is proposed; and the proposed research is innovative and sets the groundwork for future work in this area.

Reviewer 5 answered “**agree**” to the statements: “ the proposal is well thought out and theoretically sound and the PI makes a compelling case that the proposed research is necessary.

Comment 1 from Reviewer 5: “Although the RFP sites Child sexual abuse (CSA) problems in the U.S and Canada, the PI can make a case to say that the proposed study will focus on the U.S., and the findings will be applicable to Canada. A convincing statement needs to be made about how findings from a study conducted in the U.S. can be generalized to the Canadian

medical schools. Suggestion: The scientific rigor of the methodological approach could position the study for replication in other environments.”

Response to comment 1: The suggested statement was incorporated into the Methodology section in Chapter III.

Comment 2 from Reviewer 5: “The PI has provided good theories that were reviewed in PPP to guide the developing of the program/curriculum. That is good information. There is a need for a more in-depth discussion of those theories, and to develop hypotheses that the study intends to test. Here is one reference that could be useful: http://www.proval-services.net/download/Chen_workshop.pdf”

Response to comment 2: A more in-depth discussion of the theoretical framework for the *Physician’s Power to Protect* curriculum was included in this proposal.

Comment 3 from Reviewer 5: “The PI has reviewed good literature on the prevalence of child sexual abuse and the challenges associated with the burden, including challenges emanating from the clinicians. What appears to be missing is the literature about Program Evaluation. That literature should give the PI a point of departure from what the PPP could have covered. For instance, the reviewers would be interested in knowing a justification for evaluating the PPP curriculum. What is novel about this study, and what contribution does it bring to the literature regarding interventions that have been designed to address gaps in teaching about detection and management of issues related to child sexual abuse? Please note that while the theories discussed above are useful in guiding the formulation of hypothetical questions for the study. Literature about Program Evaluation models in Public health is needed to explain the

process (methodology) of the study. Here is a link to the CDC manual that could be helpful:

<http://www.cdc.gov/mmwr/pdf/rr/rr4811.pdf>”

Response to comment 3: An expanded section on program evaluation was included in Chapter I and Chapter III to address this reviewer’s comments and bolster the methodology section of this thesis grant proposal.

Comment 4 from Reviewer 5: “The PI is very knowledgeable about the subject matter. As a Physician and College Educator, she understands both the medical challenges associated with child sexual abuse and the necessity for a well-designed curriculum. The PI has specified key areas of the proposal although some of them need refining (please see my editorial remarks in the manuscript)”.

“Suggestion: The following sections need re-working to facilitate a smooth flow of logical ideas about existing gaps in the medical curriculum which apparently exacerbate child sexual abuse:

- **Problem Statement (PPP Curriculum for medical students).** While child sexual abuse is key, the issue at stake is whether the PPP curriculum is / has yielded the outcomes it purported to get (Efficacy). A clear problem statement which aligns with the abstract all the other parts of the proposal will add value to the proposal.
- **Theoretical Framework:** A chart describing associations (correlations) between/among variables you plan to test will be powerful. I suggest you develop hypotheses from each theory before you move to discuss another theory.
- **Methods and Measures:** The CDC Public Health model could be useful here. Be sure to describe the preliminary (baseline) study that the author conducted to provide a basis for a more

detailed evaluation. The baseline study should also be mentioned earlier in relevant sections such as -- Background section or under Justification.”

Response to comment 4: This feedback was very helpful and contributed greatly, along with the other comments, in strengthening this proposal. The respective areas/sections in Chapters I, II and III were re-written/expanded to address the concerns engendered in these comments.

Comment 5: “Yes, it is a fascinating study, especially since it is the first of the kind to evaluate a novel program (PPP) at the Regents University. As I have mentioned earlier, a well-developed problem statement, theoretical framework, hypotheses, and methodology specifying how validity and reliability issues will be taken into account will position the study for replication and generalizability. Great study!”

Response to comment 5: As with comment 4, the respective areas/sections in Chapters I, II and III were re-written/expanded to address the concerns engendered in this comment.

Chapter V: The Final Version of the Proposal

Application for the Online Health Research grant funded by PSI copied and pasted below.

Investigators

Please take note of information bubbles beside some questions. These may contain important guidelines or tips.	
Please note: All communication sent via the online system will be automatically directed to the account holder. If the account holder is a different person than the Principal Investigator, please consider if this is the correct person to handle inquiries before an application is submitted.	
<hr/> Principal Investigator <hr/>	
*First Name:	Paula
Middle Initial:	Walker
*Last Name:	King
*Project Role (select one):	Independent Investigator
Clinical Appointment:	Physician
*Title:	Associate Professor
*Institution:	University System of Georgia/Medical College of Georgia at Augusta University

Academic Appointment:	University System of Georgia, USA
*Telephone:	(858) 230-8519
*Email:	paula.dorita.walker@emory.edu
*City/Town:	Atlanta
*Province:	USA
*Postal Code:	30322
*Upload a file of the Principal Investigator's Curriculum Vitae:	(to be uploaded on PSI Foundation website for grant applications)
PSI Funding Report	Not applicable; Physician's Power to Protect program evaluation is supplied as supporting documentation with this application
If a PSI Foundation grant has been received by the Principal Investigator in the past, please provide citations for all publications or presentations resulting from the grant. Please specify if presentations are podium or poster. If none are available, please provide a summary of the results of research and the reasons for the lack of publication or presentation. Please ensure all uploaded documents include identifying headings.	Not applicable
*Do you have a Funding Report to add?	Yes (Budget for the program)
*Do you have a Co-Principal Investigator to add?	Yes
*Do you have Co-Investigators to add?	Mrs. Angela Williams, MS; Founder of Voice Today, Inc.

*Do you have Collaborators to add?	Medical College of Georgia at Augusta University; Northern Ontario School of Medicine

Sponsoring Institution

Please take note of information bubbles beside some questions. These may contain important guidelines or tips.	
<hr/> Sponsoring Institution <hr/>	
*Institution Name:	Northern Ontario School of Medicine
*Charitable Registration Number:	Not applicable
<hr/> Grant Administrator Details <hr/>	
*First Name:	Kris
*Last Name:	Barnes
*Telephone Number:	678-578-4888
*Email:	Kris.barnes@voicetoday.org
*Street Address:	3855 Shallowford Rd.
Suite/Unit Number:	Suite #110

*City/Town:	Marietta
*Province/State:	GA
*Postal Code:	30062
Documentation	
If the following approvals have not been received yet, please choose pending. If any are not required, please choose Not Required. (Research Ethics Board Approval must be received before funds are released, but is not needed to apply.)	
* Research Ethics Approval:	Not Required; No IRB approval needed
* Clinical Trials Registration:	CITI Certification
* Health Canada Drugs and Health Products Approval:	No

Study Summary

*Research Project Title:	Physician's Power to Protect: A Grant Proposal for a Health Education Program Evaluation
*Type of Research:	Program Evaluation
Funding Requested	\$80,000

*Year One:	\$80,000.00
*Year Two:	\$80,000.00
*Total Amount:	\$160,000.00
*Duration of Project (maximum 2 years):	2 years
*Project Start Date:	7/1/2016
* Lay Summary:	The funding acquired from this grant proposal will be used to evaluate the effectiveness of the Physician's Power to Protect curriculum. Evaluation is pivotal, especially since the Physician's Power to Protect program can address a critical gap in graduate medical education and training..
Resubmission	
* Is this a Resubmission of a previously declined application to the Foundation?	N/A

Application Contents

Application Contents	
Please ensure all uploaded documents include identifying headings.	
* Statement of objectives and specific aims of the project in the form of hypothesis (1 page	See corresponding section in narrative below

maximum):	
*Statement of Relevance (1/2 page maximum) Please highlight the relevance and impact of this proposal on the health of Ontarians:	See corresponding section in narrative below
*Background, rationale and present state of knowledge (6 pages maximum). List of reference for this section (2 pages maximum):	See corresponding section in narrative below
*Project design, methodology and analysis (8 pages maximum). List of references for this section (1 page maximum):	See corresponding section in narrative below

Budget

Budget Items (items not fully justified in the rationale will not be considered)	Budget included in methodology, which includes all personnel and equipment needs.
*Do you have a Personnel item to add?	Budget included in methodology, which includes all personnel and equipment needs.
*Do you have an Equipment item to add?	Budget included in methodology, which includes all personnel and equipment needs.
*Do you have a Materials and Supplies item to add?	Budget included in methodology, which includes all personnel and equipment needs.
*Do you have a Conference Presentations and Publications item to add?	No
*Do you have any Other Expenses item to add?	No
<hr/> TOTAL BUDGET REQUESTED <hr/>	\$1600,000.00
*Total Year One:	\$80,000.00

*Total Year Two:	\$80,000.00
Please manually add the Total Year One and Total Year Two to get the Total Amount:	\$160,000.00
*Total Amount:	\$160,000.00
<hr/> OTHER FUNDING <hr/>	N/A
Results of funding from other sources may affect your approved budget, therefore please notify the Foundation immediately if you have received other funding.	
*Have you applied / intending to apply for Other Funding for this study?	No

Appendices

<hr/> Appendices <hr/>	
*Do you have any Appendices to add?	Yes

Suggested External Reviewers

Please take note of information bubbles beside some questions. These may contain important guidelines or tips.	
<hr/> Suggested Reviewer 1	

<hr/>	
*Last Name:	Hemphill-Dickson
*First Name:	Suzanne
*Title/Academic Appointment:	Director of Public Health
*City/Town:	Atlanta
*State/Province:	Georgia
*Country:	USA
Telephone Number:	301-345-8357
*Email:	drsuhemphill@aol.com
<hr/> Suggested Reviewer 2 <hr/>	
*Last Name:	Townsend
*First Name:	Beverley

*Title/Academic Appointment:	Director, Muscogee County Health Department
*City/Town:	Columbus
*State/Province:	Georgia
*Country:	USA
Telephone Number:	706-321-6108
*Email:	Beverley.Townsend@dph.ga.gov
<hr/> Suggested Reviewer 3 <hr/>	
*Last Name:	Jackson
*First Name:	Floyd
*Title/Academic Appointment:	Associate Professor
*City/Town:	Columbus
*State/Province:	GA

*Country:	USA
Telephone Number:	706-569-3031
*Email:	Jackson_Floyd@columbusstate.edu
<hr/> Suggested Reviewer 4 <hr/>	
*Last Name:	Wakoko
*First Name:	Florence
*Title/Academic Appointment:	Associate Professor
*City/Town:	Columbus
*State/Province:	Georgia
*Country:	USA
Telephone Number:	706-507-8690
*Email:	Wakoko_Florence@columbusstate.edu

Signatures

Please take note of information bubbles beside some questions. These may contain important	
---	--

guidelines or tips.	
<hr/> Signatures <hr/>	
<p>By signing the signature page, you certify that:</p> <ul style="list-style-type: none"> • All information in this application is accurate and truthful • You have read and understood PSI's policies as stated in the Application Guidelines • You agree to all of PSI's terms and conditions for undertaking the research protocol as stated in the Application Guidelines • You agree to PSI's requirements of researchers and administrators as stated in the Application Guidelines 	
<p>Failure to adhere to PSI's policies and terms of the grant offer may result in grant cancellation.</p>	
<p>Please download and complete signature sheet.</p>	Done
<p>*Upload document:</p>	
<p>*</p>	

Statement of Objectives/Aims

The purpose of this grant proposal is to acquire funding to evaluate the *Physician's Power to Protect* child sexual abuse prevention program.

Physician's Power to Protect was created in conjunction with Emory University Rollins School of Public Health and VOICE Today, Inc., which is a non-profit organization in Marietta, GA that is committed to breaking the silence and cycle of child sexual abuse through awareness, prevention and healing programs. The *Physician's Power to Protect* curriculum was developed in response to the findings of a needs assessment that explored “child sexual abuse as a public health issue to gain understanding whether there is a need to intervene at the primary medical practice level” (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014). The goal of the assessment was “to determine who needs to be educated, what type of education is necessary and how child sexual abuse awareness and prevention can be incorporated into pediatric wellness check-ups and anticipatory guidelines” (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014). The assessment indicated that there is a need for prevention education on child sexual abuse at the primary medical practice level (Bascombe, Hennessy, Lacy, Lucido, & Phillips, 2014).

Physician's Power to Protect is a program that aims to train medical professionals in the prevention and early detection of child sexual abuse. The program is designed for third and fourth year medical students as they are preparing for their first year of residency as well as physicians in the post M.D. educational environment to educate them on ways to integrate child sexual abuse prevention into their work (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014). In February 2016, *Physician's Power to Protect* was taught for the first time at the Medical College of Georgia at Augusta University. The funding acquired from this grant proposal will be used to evaluate the effectiveness of the

Physician's Power to Protect curriculum. Evaluation is pivotal, especially since the *Physician's Power to Protect* program can address a critical gap in graduate medical education and training.

Statement of Relevance

This thesis confronts the primarily reactive efforts of existing public health surveillance systems and the paucity of training related to child sexual abuse prevention. The *Physician's Power to Protect* educational program is designed to educate medical professionals on the prevention and early detection of child sexual abuse. However, this recently created and adopted educational program at the Medical College of Georgia at Augusta University needs to be evaluated for effectiveness.

In public health, program evaluation “is a standardized method that’s routinely used to assess the effects of educational programs (Patton, 1997).” This thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the *Physician's Power to Protect* program. The implementation of a sound evaluation approach will position the study and *Physician's Power to Protect* for replication in other environments e.g. Canada. Moreover if this proposal is funded, a successful program evaluation of the *Physician's Power to Protect* program could position this curriculum to be a standard in child sexual abuse training and prevention.

Background, Rationale and Present State of Knowledge

Child sexual abuse is defined as “persuading or forcing a child to participate in sexual activities or engage in sexual behaviors (National Society for the Prevention of Cruelty to Children, 2014).” There are many forms of child sexual abuse, including but not limited to “rape, fondling, sexual assault, exposure, voyeurism, and the commercial sexual exploitation of children (National Sexual Violence Resource Center, 2012).” As demonstrated in the ACE study,

the sexual abuse of children and adolescents is a global problem that is potentially damaging to their long-term physical and psychological health (Jenny & Crawford-Jakubiak, 2013).

According to the United States Centers for Disease Control and Prevention, 1 in 4 girls and 1 in 6 boys will be sexually abused before their 18th birthday (Centers for Disease Control and Prevention, 2012). There's an overall estimation that 1.8 million children and adolescents in the United States are sexual abuse victims (U.S. Dept. of Justice Dru Sjodin National Sex Offender Public Website, 2015).

In Canada, the second most prevalent type of police-reported violence committed against children and youth is sexual assault (Statistics Canada, 2015). In 2008, there were “over 13,600 child and youth victims of sexual offences reported to police in Canada (Statistics Canada, 2015). Over half (59%) of all victims of sexual assault were children and youth under the age of 18 while the rate of sexual assaults against children and youth was 1.5 times higher than the rate for young adult aged 18 to 24 in 2008 (201 per 100,000 children and youth compared to 130 for young adults) (Statistics Canada, 2015).”

Medical training in child abuse is inadequate in the United States. Both practicing pediatricians and residents report discomfort with child abuse evaluations. Studies have addressed comfort and training but have not directly assessed child abuse knowledge (Starling, Heisler, Paulson, & Youmans, 2009). A 2006 pilot study that assessed the training and knowledge of residents revealed significant deficits in training and knowledge, but the study was limited to residents in two medical schools (Starling, Heisler, Paulson, & Youmans, 2009). “To find out whether these deficits existed at the national level, a nationally representative sample of program directors and third-year pediatric, emergency medicine (EM), and family medicine

(FM) residents in 67 US residency programs were surveyed (Starling, Heisler, Paulson, & Youmans, 2009).” The conclusion of the survey revealed that pediatric programs provide far more training and resources for child abuse education than emergency medicine and family medicine programs (Starling, Heisler, Paulson, & Youmans, 2009). Compared with emergency medicine and family medicine residents, pediatric residents reported receiving more hours of didactic instruction, clinical teaching, and clinical experiences and seeing more abused patients (Starling, Heisler, Paulson, & Youmans, 2009).

“As for specialized knowledge of child sexual abuse, although pediatric programs provided the most training in the 2006 pilot study, the knowledge quiz still challenged many pediatric residents, whose average score was 73%. Thirty-two percent of these residents misdiagnosed a normal colposcopic examination (a procedure to closely examine the cervix, vagina and vulva) (Starling, Heisler, Paulson, & Youmans, 2009).” Similar deficits have been observed in other studies of medical residents (Starling, Heisler, Paulson, & Youmans, 2009). Dubow et al surveyed 139 pediatric chief residents and found that 50% considered their training in sexual abuse inadequate (Dubow, Giardino, Christian, & Johnson, 2005). “Although many patients present to the emergency department with child abuse–related issues, very few studies have assessed Emergency Medicine residents’ training in abuse (Hyden & Gallagher, 1992).”

As an emergency medicine physician, I can certainly attest that child sexual abuse training was completely absent from my residency program. Not even a single didactic presentation was dedicated to the topic. Given the high probability and likelihood that most cases of sexual assault and sexual violation initially present to the emergency department (ED), this lack of training is baffling and leaves most emergency medicine medical professionals relatively ill prepared for addressing these cases.

“Although the Accreditation Council for Graduate Medical Education (ACGME) requires pediatric residents to learn about child physical and sexual abuse in their emergency and acute illness experience, many programs do not offer a child abuse rotation as a separate educational experience (Narayan, Socolar, & St. Claire, 2006).” The July 1, 2007, ACGME Program Requirements for Graduate Medical Education in Pediatrics does not list child abuse pediatrics among the subspecialty rotations that meet subspecialty training requirements (ACGME Program Requirements for Graduate Medical Education, 2007).

Child maltreatment is just as prevalent in Canadian society (Ward M. , et al., 2004). Using country-specific national methods, it was estimated that in 2006, “children in the U.S. experienced maltreatment at a rate of 17.1 per 1,000 children in the general population, while Canadian rates of substantiated child maltreatment in 2008 were estimated at 14.1 per 1,000 (PHAC, 2010; Sedlak et al., 2010).” The Canadian Incidence Study of Reported Abuse and Neglect estimated that “2.1% of Canadian children are the subjects of child maltreatment investigations and 0.97% are confirmed to have suffered maltreatment (Trocme, et al., 2001).” This is likely an underestimate of the true incidence as many cases go unreported. Previous retrospective data from the Ontario Health supplement found that “33% of males and 27% of females reported experiences of physical/sexual abuse during childhood (MacMillan, et al., 1997).”

“The Badgley report (1984) is the only national study ever conducted in Canada on child sex abuse (Sexual Offenses Against Children in Canada, 1984).” The author reported on survey results from adults and indicated that 54% of girls and 32% of boys were sexually abused before the age of 18 (Sexual Offenses Against Children in Canada, 1984).

Like in the U.S., physician knowledge and training in child protection have been questioned in Canada also (Ward M. , et al., 2004). In 2004, a landmark study examined the experience, perceived adequacy of training perceived competency of Canadian pediatric residents in child protection (Ward M. , et al., 2004). “Structured questionnaires were sent to child protection program directors (CPPDs), pediatric program directors (PPDs) and pediatric residents at the 16 Canadian pediatric academic centers (Ward M. , et al., 2004). Responses were obtained from 15 of 16 CPPDs, all 16 PPDs, and 190 of 348 (54.6%) residents (Ward M. , et al., 2004).” The study revealed that “there is child protection specialists affiliated with all Canadian pediatric residency programs, and all programs reported some form of teaching on child maltreatment (Ward M. , et al., 2004).” Consequently, “residents’ self-rating of competency was positively associated with number of years of training and number of cases of maltreatment seen (Ward M. , et al., 2004).” Almost all residents (92%) felt that they needed further training in child protection, including 85% of graduating residents (Ward M. , et al., 2004). Some of the Canadian residents (16.4%) did not anticipate dealing with child protection cases as practicing pediatricians (Ward M. , et al., 2004). Even senior pediatric residents reported seeing few cases of suspected child maltreatment (Ward M. , et al., 2004). This is particularly concerning given that residents’ perceived competency in evaluating and managing cases of maltreatment was related to the number of cases of maltreatment encountered in their training (Ward M. , et al., 2004). Further, a previous study demonstrated that the likelihood of reporting maltreatment among practicing physicians was related to the amount of training that they had received in this field (Lawrence & Brannen, 2000). An American study of residents’ knowledge of child maltreatment also found the scores to be positively correlated with the residents’ reports of exposure to child abuse instruction in their training programs (Woolf, et al., 1988).

Medical Educators across Canada are presently discussing whether the current 4-year residency programs adequately prepare pediatricians for their future careers (Lieberman & Hilliard, 2006). Existing studies carried out in the USA have repeatedly shown areas of weakness in residency training, but there are no studies looking at the overall adequacy of training across Canada (Lieberman & Hilliard, 2006).

A review of the literature reveals that there is limited training for medical professionals on the topic of child sexual abuse in the U.S. and in Canadian graduate medical education models, including the post M.D. educational environment. Therefore, effective strategies for preventing child maltreatment are needed. Few primary care-based programs have been developed, and most have not been well evaluated (Dubowitz, Feigelman, Lane, & Kim, 2009). The *Physician's Power to Protect* program has been designed for medical professionals to address this gap in specialized and standardized training pertaining to the prevention and detection of child sexual abuse. Given the existing data, there is a need for such a program to be implemented in the existing graduate medical education landscape. However prior to implementation, the *Physician's Power to Protect* program should be fully evaluated. This thesis develops a public health grant proposal to evaluate the effectiveness of the curriculum, methods and teaching resources of the *Physician's Power to Protect* program in preparedness for its integration and adoption by medical schools throughout Georgia and across the U.S. and Canada.

Project Design & Methodology

The *Physician's Power to Protect* curriculum consists of a Facilitator's Guide and Student Toolkit, which is a separate booklet filled with supplemental information to be provided

to each student (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).

There are two overall goals of the *Physician's Power to Protect* curriculum. The first is “to equip third and fourth year medical students with the knowledge and skills to detect and prevent child sexual abuse (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).” The second is for students “to be able to describe a comprehensive outline guiding the process of detecting, identifying, communicating and reporting a child sexual abuse case (Duan, Green, Mehrotra, Odani, & Rogers, Physician's Power to Protect: Facilitator's Guide, 2014).” According to the Facilitator’s Guide, the *Physician’s Power to Protect* curriculum consists of five (5) lessons:

1. Child Sexual Abuse: The Basics
2. Detecting Child Sexual Abuse
3. Communicating Child Sexual Abuse
4. Reporting and the Legal System
5. Providing Resources

Additionally, there are three (3) objectives identified in the guide:

1. At least 80% of the students will be able to identify and detect child sexual abuse
2. At least 80% of the students will be able to appropriately communicate with pediatric patients and their families regarding child sexual abuse

3. At least 80% of the students will be able to identify the appropriate disclosure and reporting procedure when handling potential child sexual abuse cases.

The *Physician's Power to Protect* curriculum is intended to be offered as part of the lecture material and modules during the third and fourth year of medical school (Duan, Green, Mehrotra, Odani, & Rogers, *Physician's Power to Protect: Facilitator's Guide*, 2014). Likewise, the curriculum can be adapted to the post M.D. educational environment to include residency programs and the primary medical practice level. Recently, the curriculum was successfully implemented at the Medical College of Georgia at Augusta University.

At the inception of the *Physician's Power to Protect* program, an evaluation of the curriculum was proposed. Currently, pre- and post-training surveys are used as evaluation tools for the *Physician's Power to Protect* program (Appendix 3 and Appendix 4).

The scientific rigor of this program evaluation could position this study for replication in other environments beyond the U.S., such as Canadian medical schools.

Budget

PHYSICIAN'S POWER TO PROTECT CHILD SEXUAL ABUSE PREVENTION PROGRAM				
PROGRAM ALLOCATION	Phase I	Phase II	Phase III	COST
	Jan 2016 - Jan 2017	2017-2018	2018-2019	3-Year Plan
Total Physicians Offices Served	10	20	40	40
Total Physicians Served	50	100	200	200
Total Children Served	150,000	300,000	600,000	600,000
Operations				
Staff	\$195,000	\$385,000	\$462,000	\$1,042,000
Training				
PPP Curriculum Printing	\$12,000	\$12,000	\$13,000	\$37,000
Training Event Costs	\$10,000	\$15,000	\$25,000	\$50,000
Continuing Education Accreditation	\$10,000	\$5,000	\$5,000	\$20,000
CEU Module Training & Certification	\$12,000	\$7,500	\$8,500	\$28,000
Caregiver & Child Prevention Resources				
Digital Production	\$50,000	\$10,000	\$10,000	\$70,000
Collateral Materials	\$88,000	\$176,000	\$352,000	\$616,000
Office Kiosk / Production	\$50,000	\$100,000	\$100,000	\$250,000
PPP Mobile Application	\$50,000	\$7,500	\$7,500	\$65,000
PPP Website	\$7,000	\$5,000	\$5,000	\$17,000
Marketing	\$50,000	\$50,000	\$50,000	\$150,000
Research and Development	\$200,000	\$200,000	\$200,000	\$600,000
Professional Consulting Policy Reform	\$100,000	\$50,000	\$50,000	\$200,000
Rent and Utilities	\$110,000	\$129,000	\$151,000	\$390,000
Total Program Cost	\$944,000	\$1,152,000	\$1,439,000	\$3,535,000
Estimated Yearly Cost of Child Sexual Abuse	\$450,000,000	\$450,000,000	\$450,000,000	\$1,350,000,000
Proposed Healthcare Professional Reimbursement	\$75	\$75	\$75	\$75
Cost Per Child	\$6.29	\$3.84	\$2.40	\$5.89
Cost Per Well Check	\$81.29	\$78.84	\$77.40	\$80.89
Yearly Cost of Abused Child				\$63,871

Appendix 1: References

- (2016). Retrieved from Centers for Disease Control and Prevention: <http://www.cdc.gov>
- ACGME Program Requirements for Graduate Medical Education*. (2007). Retrieved from http://www.library.musc.edu/tree_docs/pem/ACGME_ProgramRequirements7-07.pdf
- American College of Preventive Medicine. (2010). *A Statement of American College of Preventive Medicine submitted to the Labor, Health and Human Services, Education, and Related Agencies Subcommittee*.
- American Medical Association. (1992). *Diagnostic and Treatment Guidelines on Child Sexual Abuse*. Chicago: American Medical Association.
- Anda, R., Brown, D., Dube, S., Bremner, D., Felitti, V., & Giles, W. (2008). Adverse Childhood Experiences and Chronic Obstructive Pulmonary Disease in Adults. *American Journal of Preventive Medicine*, 396-403.
- Anda, R., Butchart, A., Felitti, V., & Brown, D. (2010). Building a Framework for Global Surveillance of the Public Health Implications of Adverse Childhood Experiences. *American Journal of Preventive Medicine*, 93-98.
- Bascombe, T., Hennessy, G., Lacy, L., Lucido, B., & Phillips, E. (2014). *Integration of Child Sexual Abuse Prevention into Pediatric Care: A Community Needs Assessment*. Atlanta: Voice Today, Inc.
- Bernard-Thompson, K., & Leichner, P. (1999). Psychiatric Residents' Views on Their Training and Experience Regarding Issues Related to Child Abuse. *Canadian Journal of Psychiatry*, 769-774.
- Biehler, J., Apolo, J., & Burton, L. (1996). Views of Pediatric Emergency Fellows and Fellowship Directors Concerning Training Experiences in Child Abuse and Neglect. *Pediatric Emergency Care*, 365-369.
- Brotherton, S., & Etzel, S. (2006). Graduate Medical Education, 2005-2006. *Journal of American Medical Association*, 1151-1169.
- Centers for Disease Control and Prevention*. (2012). Retrieved from www.cdc.gov
- Child & Youth Victims of Police-Reported Violent Crime*. (n.d.). Retrieved from Statistics Canada.

- Child Abuse Pediatrics Certification*. (2015, November). Retrieved from The American Board of Pediatrics: <https://www.abp.org/content/child-abuse-pediatrics-certification>
- Christian, C. (2008). Professional education in Child Abuse and Neglect. *Pediatrics*, S13-S17.
- Christian, C. (2008). Professional Education in Child Abuse and Neglect. *Pediatrics*, S13-S17.
- Duan, R., Green, C., Mehrotra, A., Odani, S., & Rogers, H. (2014). *Physician's Power to Protect Student Toolkit*. Atlanta: Voice Today, Inc.
- Duan, R., Green, C., Mehrotra, A., Odani, S., & Rogers, H. (2014). *Physician's Power to Protect: Facilitator's Guide*. Atlanta: Voice Today, Inc.
- Dubow, S., Giardino, A., Christian, C., & Johnson, C. (2005). Do Pediatric Chief Residents Recognize Details of Prepubertal Female Genital Anatomy? A National Survey. *Child Abuse and Neglect*, 195-205.
- Dubowitz, H., Feigelman, S., Lane, W., & Kim, J. (2009). Pediatric Primary Care to Help Prevent Child Maltreatment: The Safe Environment for Every Kid (SEEK) Model. *Pediatrics*, 858-864.
- Federal Interagency Forum on Child & Family Statistics. (2012). *America's Children in Brief: Key National Indicators of Well-Being*. Washington, DC: U.S. Government Printing Office.
- Feigelman, S., Dubowitz, H., Lane, W., Grube, L., & Kim, J. (2011). Training Pediatric Residents in a Primary Care Clinic to Help Address Psychosocial Problems and Prevent Child Maltreatment. *Academic Pediatrics*, 474-480.
- Ferraro, K. F., Schafer, M. H., & Wilkinson, L. R. (2016). Childhood Disadvantage and Health Problems in Middle and Later Life: Early Imprints on Physical Health. *American Sociological Review*, 107-133.
- Finkelhor, D., Hotaling, G., Lewis, I., & Smith, C. (1990). Sexual Abuse in a National Survey of Adult Men and Women: Prevalence, Characteristics and Risk Factors. *Child Abuse and Neglect*, 19-28.
- Flaherty, E., Sege, R., Binns, H., Mattson, C., & Christoffel, K. (2000). Health Care Providers Experience Reporting Child Abuse in the Primary Care Setting. *Archives of Pediatric and Adolescent Medicine*, 489-493.
- Flango, V. (1991). Can Central Registries Improve Substantiation Rates in Child Abuse and Neglect? *Child Abuse and Neglect*, 403-413.

- Fontana, V. (1964). *The Maltreated Child: The Maltreatment Syndrome in Children*. Springfield, IL: Thomas.
- Giovanelli, A., Reynolds, A. J., Mondri, C. F., & Ou, S.-R. (2016). Adverse Childhood Experiences and Adult Well-Being in a Low-Income, Urban Cohort. *Pediatrics*, 1-11.
- Glanz, K., Rimer, B., & Viswanath, K. (2008). *Health Behavior and Education*. San Francisco: John Wiley & Sons, Inc.
- Glanz, K., Rimer, B., & Viswanath, K. e. (2008). *Health Behavior and Health Education: Theory, Research and Practice (Fourth Edition)*. John Wiley & Sons, Inc.
- Heisler, K. W., Starling, S. P., Edwards, H., & Paulson, J. F. (2006). Child Abuse Training, Comfort, and Knowledge Among Emergency Medicine, Family Medicine and Pediatric Residents. *Medical Education Online*, 1-9.
- Helfer, R., & Kemp, C. (1964). *The Battered Child*. Chicago: University of Chicago Press.
- Hyden, P., & Gallagher, T. (1992). Child Abuse Intervention in the Emergency Room. *Pediatric Clinic of North America*, 1053-1081.
- Jenny, C., & Crawford-Jakubiak, J. E. (2013). The Evaluation of Children in the Primary Care Setting when Sexual Abuse is Suspected. *Pediatrics*, e558-e567.
- Jones, R., Flaherty, E., & Binns, H. e. (2008). Clinician's Description of Factors Influencing Their Reporting of Suspected Child Abuse: Report of the Child Abuse Reporting Experience Study Research Group. *Pediatrics*, 259-266.
- Kaplan, R. (n.d.). The Medical Response to Child Sexual Abuse: A Historical Overview. In R. Kaplan, J. A. Adams, S. P. Starling, & A. P. Giardino, *Medical Response to Child Sexual Abuse: A Resource for Professionals Working with Children & Families* (pp. 1-2). St. Louis: STM Learning, Inc.
- Kempe, C., Silverman, F., Steele, B., Droegemueller, W., & Silver, H. (1962). The Battered Child Syndrome. *Journal of American Medical Association (JAMA)*, 17-24.
- Kerns, D. L., Terman, D. L., & Larson, C. S. (1994). The Role of Physicians in Reporting and Evaluating Child Sexual Abuse Cases. *The Future of Children*, 119-134.
- Krugman, R., & Cohn, F. (2001). Time to End Health Professional Neglect of Cycle of Violence. *Lancet*, 434.
- Krugman, R., Bays, J., & Chadwick, D. (1991). Committee on Child Abuse and Neglect, American Academy of Pediatrics: Guidelines for the Evaluation of Sexual Abuse of Children. *Pediatrics*, 254-260.

- Ladson, S., Johnson, C., & Doty, R. (1987). Do Physicians Recognize Sexual Abuse? *American Journal of Diseases of Children*, 411-415.
- Lawrence, L., & Brannen, S. (2000). The Impact of Physician Training on Child Maltreatment Reporting: A Multi-Specialty Study. *Military Medicine*, 607-611.
- Lentsch, K. A., & Johnson, C. F. (2000). Do Physicians Have Adequate Knowledge of Child Sexual Abuse? The Results of Two Surveys of Practicing Physicians, 1986 and 1996. *Child Maltreatment*, 72-78.
- Liaison Committee on Medical Education Functions and Structure of a Medical School: Standards of Accreditation of Medical Programs Leading to the MD degree.* (2006). Retrieved from www.lcme.org/standard.htm
- Lieberman, L., & Hilliard, R. I. (2006). How Well do Paediatric Residency Programmes Prepare Residents for Clinical Practice and Their Future Careers? *Medical Education*, 539-546.
- MacMillan, H., Fleming, J., Trocme, N., Boyle, M., Wong, M., Racine, Y., . . . Offord, D. (1997). Prevalence of Child Physical and Sexual Abuse in the Community: Results from the Ontario Health Supplement. *Journal of the American Medical Association*, 131-135.
- Magruder, K. M., Kassam-Adams, N., Thoresen, S., & Olf, M. (2016). Prevention and Public Health Approaches to Trauma and Traumatic Stress: A Rationale and a Call to Action. *European Journal of Psychotraumatology*, 1-9.
- McInerney, T. (. (2009). *Anticipatory Guidance: An American Academy of Pediatrics Textbook of Pediatric Care*. Washington, D.C.: American Academy of Pediatrics.
- Narayan, A., Socolar, R., & St. Claire, K. (2006). Pediatric Residency Training in Child Abuse and Neglect in the United States. *Pediatrics*, 2215-2221.
- National Children's Alliance. (2013). *National Children's Alliance Statistical Fact Sheet*. Retrieved from <http://www.nationalchildrensalliance.org/sites/default/files/download-files/2015NationalChildrensAlliance-NationalAbuseStatistics.pdf>
- National Sexual Violence Resource Center. (2012, August). *Understanding child sexual abuse definitions and rates*. Retrieved from http://www.nsvrc.org/sites/default/files/NSVRC_Publications_TalkingPoints_Understanding-Child-Sexual-Abuse-definitions-rates.pdf
- National Society for the Prevention of Cruelty to Children. (2014).
- Olsen, M., & Kalbfleisch, J. (2001). Sexual Abuse Knowledge Base Among Residents in Family Practice, Obstetrics/Gynecology, and Pediatrics. *Journal of Pediatric Adolescent Gynecology*, 89-94.

- Orr, D., & Prietto, S. (1979). Emergency Management of Sexually Abused Children. *American Journal of Diseases of Children*, 628-631.
- Patton, M. Q. (1997). *Utilization-Focused Evaluation: The New Century Text, 3rd Edition*. Thousand Oaks: Sage Publications, Inc.
- Problem Based Learning*. (2015). Retrieved from Learning Theories.com: <http://www.learning-theories.com/problem-based-learning-pbl.html>
- Public Health Agency of Canada (PHAC)*. (2010). Retrieved from Canadian Incidence Study of Reported Child Abuse and Neglect - 2008: Major Findings: <http://www.phac-aspc.gc.ca/cm-vee/public-eng.php>
- Rheingold, A., Zajac, K., Chapman, J., Patton, M., deArellano, M., Saunders, B., & Kilpatrick, D. (2014). Child Sexual Abuse Prevention Training for Childcare Professionals: An Independent Multi-Site Randomized Controlled Trial of Stewards of Children. *Prevention Science*.
- Robert Wood Johnson Foundation. (2002). *RWJF Program Results Report - Preparing Physicians for the Future: A Program in Medical Education*. Robert Wood Johnson Foundation.
- Sarkin, R. (2001). Council on Medical Student Education in Pediatrics. *Journal of Pediatrics*, 1-2.
- Saul, J., Valle, L., Mercy, J., Turner, S., Kaufmann, R., & Popovic, T. (2014). *CDC Grand Rounds: Creating a Healthier Future Through Prevention of Child Maltreatment. Morbidity and Mortality Weekly Report (MMWR)*. Atlanta: Centers for Disease Control & Prevention.
- Saulsbury, F., & Campbell, R. (1985). Evaluation of Child Abuse Reporting by Physicians. *American Journal of Diseases of Children*, 393-395.
- Sedlak, A., Mettenburg, J., Basena, M., Petta, I., McPherson, K., Greene, A., & Li, S. (2010). Fourth National Incidence Study of Child Abuse and Neglect (NIS-4): Report to Congress. *U.S. Dept. of Health and Human Resources, Administration of Children and Families*.
- Sexual Offenses Against Children in Canada*. (1984). Retrieved from https://www.attorneygeneral.jus.gov.on.ca/inquiries/cornwall/en/hearings/exhibits/Nicolas_Bala/pdf/Badgley-1.pdf
- Smith, D., Losek, J., & Glaeser, P. a.-K. (1988). Pediatric Sexual Abuse Management in a Sample of Children's Hospitals. *Pediatric Emergency Care*, 177-179.

- Socolar, R. (1996). Physician Knowledge of Child Sexual Abuse. *Child Abuse and Neglect*, 783-790.
- Starling, S. P., Heisler, K. W., Paulson, J. F., & Youmans, E. (2009). Child Abuse Training and Knowledge: A National Survey of Emergency Medicine, Family Medicine, and Pediatric Residents and Program Directors. *Pediatrics*, e595-e602.
- Starling, S., & Boos, S. (2003). Core Content for Residency Training in Child Abuse and Neglect. *Child Maltreatment*, 242-247.
- Statistics Canada*. (2015, November 27). Retrieved from Child & Youth Victims of Police-Reported Violent Crime: http://www.statcan.gc.ca/pub/85f0033m/2010023/part-partie1-eng.htm#h2_5
- The National Incidence Study, 2004-2009*. (n.d.). Retrieved from Office of Planning, Research & Evaluation: <http://www.acf.hhs.gov/programs/opre/research/project/national-incidence-study-of-child-abuse-and-neglect-nis-4-2004-2009>
- Thomas, D., Flaherty, E., & Binns, H. (2004). Parent Expectations and Comfort with Discussion of Normal Childhood Sexuality and Sexual Abuse Prevention During Office Visits. *Ambulatory Pediatrics*, 232-236.
- Trocme, N., Maclaurin, B., Fallon, B., Daciuk, J., Billingsley, D., & Tourigny, M. (2001). *Canadian Incidence Study of Reported Child Abuse and Neglect: Final Report*. Ottawa: Minister of Public Works and Government Services Canada.
- Trocme, N., Macmillan, H., Fallon, B., & DeMarco, R. (2003). Nature and Severity of Physical Harm Caused by Child Abuse and Neglect: Results from the Canadian Incidence Study. *Canadian Medical Association Journal*, 911-915.
- U.S. Dept. of Justice Dru Sjodin National Sex Offender Public Website*. (2015). Retrieved from Facts and Statistics: <https://www.nsopw.gov/en/Education/FactsStatistics?AspxAutoDetectCookieSupport=1#sexualabuse>
- Ward, M., Bennett, S., Plint, A., Jabbour, M., & King, W. (2002). Are We Training Canadian Pediatric Residents in Child Protection Issues? *Pediatric Child Health*, 21A-22A.
- Ward, M., Bennett, S., Plint, A., King, W., Jabbour, M., & Gaboury, I. (2004). Child Protection: A Neglected Area of Pediatric Residency Training. *Child Abuse and Neglect*, 1113-1122.
- Woolf, A., Taylor, L., Melnicoe, L., Andolsek, K., Dubowitz, H., DeVos, E., & Newberger, E. (1988). What Residents Know About Child Abuse: Implications of a Survey of Knowledge and Attitudes. *American Journal of Diseases of Children*, 668-672.

World Health Organization. (2016). Retrieved from
http://www.who.int/topics/health_education/en/

Wright, R., Wright, R., Farnan, L., & Issac, N. (1999). Response to Child Abuse in the Pediatric Emergency Department: Need for Continued Education. *Pediatric Emergency Care*, 376-382.

Appendix 2: Full Grant Funding Announcement (as published)

Health Research Grant Guidelines

News and Updates

“PSI Foundation’s new online application system is now in use for Health Research Grant applications.

The PSI Foundation no longer has deadlines. You may submit an application at any time.

Follow us on twitter @PSIFoundation and check our website at www.psifoundation.org for the latest news and updates, such as updated application forms and policy revisions.

Please note: all applications received by the Foundation through the online system are acknowledged automatically. You will receive a second notification of acceptance within a few weeks.

Please note our new sponsoring institution requirements on page 3 of this document. This information is also available at <http://www.psifoundation.org/sponsoring.php>.

The PSI Foundation was established in 1970 by the physicians of Ontario with the original capital of Physicians Services Incorporated, the doctor-sponsored prepaid medical care plan. The Foundation was established with the mission of improving the “health of Ontarians”. Physicians from across Ontario remain involved as members of the Foundation’s House of Delegates as well as part of the governing board of directors for the Foundation.

PSI’s granting interests are in two areas: education of practicing physicians and health research with an emphasis on research relevant to patient care. The Foundation’s support of health research is offered in the following four areas, in order of priority:

1. Clinical research
2. Medical education research at the post M.D. level
3. Health systems research
4. Healthcare research by community physicians (see separate guidelines and application form)

This document serves as the funding guidelines for the Health Research funding program offered by PSI in the areas of Clinical, Medical Education and Health Systems research. For the funding guidelines and applications for the Healthcare Research by Community Physicians or Resident Research funding programs, please visit the PSI website at www.psifoundation.org

Eligible Types of Research

- i. **Clinical Research** which is of direct relevance to patient care. Studies involving animals will be considered only if the animals are required as an immediate patient surrogate, which must be demonstrated in the written application.”

- ii. **“Medical Education Research** which focuses on projects designed to assess through research the post M.D. educational environment, such as curricula, methods and teaching resources. The Foundation recognizes that research within this area may involve teams that include non-medical researchers and consultants.

Please note that this funding stream is intended to support hypothesis driven research proposals; therefore, applications will only be considered for projects that evaluate curriculum, methods and teaching resources. Projects intended to create and/or develop curriculum, educational programs or tools will not be considered. Also, any costs attributed to the creation and/or development of curriculum, educational programs or tools will not be considered.

- iii. **Health Systems Research** which focuses on projects of a special nature within the healthcare system, such as preventative medicine, care of the elderly, communications within the system, underserved regions and ways of enhancing the effectiveness of medical practice.

Areas of Non-Support

PSI will not consider applications that focus on problems associated with cancer, heart & stroke, mental health, and drug and alcohol abuse or pharmaceutical drug studies. Rather, PSI allocates research funding to areas that may not have funding opportunities to the same extent as the areas listed above. Please note that applications submitted under the Medical Education and Health Systems Research streams are not exempt from this policy

Eligibility of Principal Investigators

The principal investigator/applicant for a research grant in one of the above three areas must be either:

- i. A College of Physicians and Surgeons of Ontario licensed M.D. with an academic appointment and therefore eligible to apply for her/his own research grants as an independent investigator.
- OR**
- ii. A fellow who is a College of Physicians and Surgeons of Ontario licensed M.D. and who has a supervising co-Principal Investigator for the research project. The supervising co-Principal Investigator must have an academic appointment and will therefore provide the necessary research supervision and infrastructure (including administering the grant at their sponsoring institution). Fellows must include with their application a letter of support from this supervising co-Principal Investigator.

New Investigators: in establishing priorities among applications submitted, when scientific merit and clinical relevance are equal, preference will be given to the new investigator over the established investigator.”

“Ineligible Principal Investigators/Applicants: Research Grant applications will not be considered from:

- Residents may not be named as the PI, Applicant, Co-Investigator, nor Collaborator (must apply through the Foundation's Resident Research Grant stream)
- Principal Investigators who hold a Ph.D. but not an MD
- Graduate students or trainees

- Investigators based outside of Ontario

PSI will consider and support only one project per Principal Investigator at any given time. If an investigator is currently being supported by PSI as the principal investigator, the Foundation will not consider an application for a new project until the end of the current granting period as agreed to by the PI and PSI. Also, applicants must not submit more than one application as Principal Investigator per grant cycle.

Sponsoring Institution

All applications must have a sponsoring institution which is registered with Revenue Canada as carrying on charitable activities. PSI now accepts applications from eligible applicants located from outside of Toronto where their research institute/hospital is named as the sponsoring institution. Previously, such applicants would have had to identify their university as the sponsoring institution.

Eligible institutions must:

- Be located in the Province of Ontario
- Be a registered charity • Have its own, independent research ethics board
- Be eligible to hold Canadian Institute of Health Research grants.

The list can be found at <http://www.cihir-irsc.gc.ca/e/36374.html>.

The sponsoring institution must provide the necessary infrastructure for the research project including, but not limited to, accounting and reporting of grant funds as well as ensuring the research is carried out according to the institution's policies and procedures and accepted research standards in Canada. In addition, REB approval **must** come from the sponsoring institution.

Amount and Duration of Funding

Up to a maximum of \$85,000 per year is available, for a maximum of two years. See further in the guidelines for use of funding and budget requirements.

If a grant is awarded, the study must commence within six months of notification. In conjunction with the Principal Investigator, PSI will establish a granting period for every award. This granting period represents the timeframe for which the grantee has to complete the study. Within three months of the end of the granting period, the research account must be closed and all unused funds remaining in the account must be returned to PSI along with a final accounting statement for how funds were used.

The institution to which a grant is paid must immediately notify and return unused funds to PSI if a grantee is unable, for any reason, to carry out or complete the research for which the grant is given.”

How to Apply

“The PSI Foundation no longer has deadlines. You may submit an application at any time. All requests for funding must be submitted using PSI’s online application system. PSI’s internal review committee will consider your application at its next meeting following the peer review process. You will receive a decision within 6 months.

To be eligible for consideration, applications must contain all requested information in full. PSI is unable to consider incomplete applications.

Please do not upload scanned documents to the online system, with the exception of letters of support with signatures and the completed signature page.

Leveraged Funding

In ranking research proposals, PSI will prioritize applications that leverages PSI’s granting dollars with additional funding. Specifically, PSI will give priority to applications that have funds from other granting funders and institutions, and not in-kind support.

Funding Criteria

Research applications will be assessed on an equal weighting basis of scientific merit and clinical relevance. Please note that when all other considerations are equal, the research types will be funded in the following order of priority:

1. Clinical research
2. Medical education research at the post-M.D. level
3. Health systems research

The following questions represent the criteria that will be considered by the Grants Committee in assessing an application (as applicable to the specifics of the research). Please consider these questions with respect to your research proposal fully before completing an application for funding to PSI:

1. Is the proposal within the interests and objectives of the Foundation, or is it a proposal which is more appropriate for support by another granting agency?
2. Does the proposed study represent truly innovative work?
 2. Will the proposal add significantly to the state of knowledge?
 3. Is there a strong knowledge translation component/plan?
 4. 5. Is the investigator fully aware of the present state of knowledge in the area to be investigated? Does the application demonstrate a comprehensive literature review was carried out?
 5. To what extent could the research project findings strengthen clinical care and improve the health outcomes of patients in Ontario?”

6. “Are the aims of the project feasible and can they be achieved realistically within the time frame outlined in the application? Are the objectives of the project testable and, if the objectives are stated in the form of a hypothesis, is the time reference reasonable with respect to the realization of the testing of this hypothesis?”
7. Are the research methods appropriate for the objectives of the study? Is the methodology of the proposal sound? The application must include sufficient detail to provide a full understanding of the steps / protocols. Is the sample size statistically justified and feasible?
8. Is the principal investigator qualified and is the environment in which he or she works satisfactory to carry out the project?
9. Are the personnel and equipment proposed adequate to carry out the project? Are all budget items sufficiently justified in the application? Is the budget feasible in relation to the objectives of the study?
10. Will the project have any impact on reducing health costs?
11. What is the relevance of the project to the provincial health context?
12. Are there alternative ways to address the clinical problem being addressed by the research?

Project Budget - Use of Funding

The total amount of requested funding may not exceed \$85,000 per year and \$170,000 over two years. The proposed budget must include a detailed budget narrative within the application (including quantities and rates/prices) to explain how amounts were determined. Ineligible or unjustified budget items will be removed from the budget. The eligible budget items are outlined as below:

Eligible Budget Items Personnel

- Salaries for technicians, technologists, research assistants and other similar persons required for the successful completion of the project and who are not assigned to the project for the purpose of receiving training.
- Salaries for personnel must be in accordance with those paid to similarly qualified persons at the institution where the project is undertaken.”

- “The Foundation will not provide salary support at a level greater than the experience required for the work to be undertaken on a project.
- The employer's cost of project staff benefits may be included in the budget proportional to hours of employee time directed to project.
- Salaries for trainees and students, including medical students and fellows.
- Personnel costs may not include any individuals named on the application (coinvestigators/collaborator) or salaries/stipends for residents.
- Secretarial assistance is also excluded.

Equipment

- Equipment necessary for carrying out the project activities is to be included in this budget category.
- The Foundation is unable to support items such as the cost of computers, furniture, tape recorders, photographic equipment and calculators. Service contracts on equipment will also not be covered.
- Ineligible costs also include fees charged by the investigator's institution for IT support (internet/web connections, software licenses, network components, etc.).

Material and Supplies

- Direct project related material and supplies
 - The cost of purchasing animals and the maintenance thereof is an allowable expense.
- Conference presentations and publication costs
- A maximum of \$1,500 per project may be allowed for travel to attend scientific meetings to present papers on a project, publication costs and the cost to purchase a reasonable number of reprints. Other Expenses
 - Direct project related items that may not fit within the categories above (such as research activity travel costs) that are necessary for completion of the project activities and requested with detailed justification is provided.

Additional Project Budget Requirements

- It is expected that the institution at which the project will be undertaken will provide research and office space.
- Grant funds must be used according to the approved project budget; however, PSI understands that the Principal Investigator is the best judge of the use of the funds awarded and may propose a change in the use of the grant funds, except where PSI has specifically excluded an expense item from its funding.
- Funds awarded will be deposited with the institution where the project will be undertaken, to be administered by the appropriate officer.
- A statement of disbursement of the funds awarded must be submitted to PSI at the completion of the project. In projects that exceed a year in duration PSI expects to receive an accounting at the end of each twelve month period, as well as the final accounting at the end of the granting period.”

- “At the time grant payment is sent by PSI to the institution, a copy of the payment letter is sent to the applicant.
- When work is completed, or cannot be continued for any reason unused funds must be immediately returned to PSI.

Funding Exclusions

Listed below are the items and areas which will not be accepted for consideration by the Foundation:

- Clinical Research Grant applications will not be accepted for research in the areas of cancer, heart and stroke and mental health, drug and alcohol abuse, pharmaceutical drug studies or where there is relatively more funding available through other agencies. If you are unsure if a potential project falls into one of the above areas of non-support, please contact the Foundation for guidance on how to proceed.
- Systematic reviews and meta-analyses
- Fund-raising campaigns
- Building funds or other capital cost campaigns
- Operating costs of any organization or department
- Budget deficits
- Membership fees
- Entertainment / hospitality costs
- Service programs
- Ongoing research
- Major equipment, unless required for a research project being supported by the Foundation
- Projects outside the province of Ontario
- Films, books and journals Decision Process

All applications received by the Foundation through the online system are acknowledged automatically. Applications submitted will be reviewed for completeness and eligibility. Once completeness and eligibility are confirmed the application will be sent for external peer review by experts in the research focus area. Applicants will receive unattributed external reviewer comments once a funding decision has been made by the Grants Committee.”

“The Grants Committee will review the full applications and external reviews prior to their meeting. At the Grants Committee meeting each application will be discussed and a consensus funding decision will be reached based on overall scientific merit and clinical relevance. All applicants will be notified of the Committee’s funding decisions within 15 business days.

External Peer Review Process

Applicants are asked to suggest potential reviewers with appropriate expertise to assess their proposal. Suggested reviewers must not have a potential real or perceived conflict of interest in reviewing the proposal. As such, applicants must not suggest the following as potential expert peer reviewers:

- A person who has a family / personal relationship with any member of the research team (including co-investigators)
- Colleagues at any member of the research team’s clinical and/or academic institution
- Current and former supervisors, students or trainees of the research team
- Anyone the research team (PI or co-I) is currently collaborating with or has collaborated with in the last two years.

Resubmission of previously declined applications

Declined applications may be resubmitted to the Foundation one time only and must include a letter detailing how the external reviewer comments to the previously declined application have been responded to in the revised resubmission.

Grant Recipient Requirements

If funding is awarded, the following requirements are a condition of funding:

1. PSI reserves the right to invite grantees to participate in the peer review grant process and may call upon a grantee, during the duration of their study, to assist in grant review. This may include, but not limited to, inviting grantees to provide peer reviews of applications and to rank multiple applications.
2. The Principal Investigator and/or the sponsoring institution are responsible for notifying PSI of any significant changes to the project, including but not limited to methodology, budget or personnel prior to the changes being implemented to ensure all aspects of the project continue to meet PSI’s funding criteria.
3. The Principal Investigator (PI) is to provide a start date and end for the project, which will also represent the start and end date of the granting period. Please note: PSI will use this date to determine when the sponsoring institution will close the research account and when to expect interim and final reports from the grant recipient.
4. The project must start within six months of the date of the letter from PSI offering funding and be completed within the approved time period.
5. If the project is delayed for any reason that will result in the project duration exceeding beyond the scheduled end date, please email your request for an extension to PSI before the original scheduled project end date. The request for extension must explain in detail the reason

for the project timeline extension, a budget update and the state of the progress of the project to date and a revised project end date. Please note that such extension requests cannot contain a request for additional funding of the same project.”

6. “PSI requires that all funded research projects adhere to the sponsoring institution’s policies and procedures as well as accepted research standards. Grant recipients must provide evidence of all applicable ethics and research standard approvals and registrations with the same title as that of the application approved by PSI.”

7. Please note that the first payment of funding and subsequent payments are conditional upon receipt of all applicable approval certificates and registrations. Upon expiry, approval certificates must be renewed and provided promptly to PSI for funding to continue.

8. Projects of duration longer than twelve months are to provide an annual report of 1 – 2 pages on the progress to date of research activities as well as an accounting report. Scheduled payments will be subject to receipt and satisfactory review of both annual research progress and accounting reports.

9. PSI will withhold 10% of the value of the grant until the PI submits a final report, which must include a final accounting statement from the sponsoring institution (with any unused funds returned) and a completed PSI Results of Research form. This material must be submitted within three months of the granting period’s end date as a condition of funding.

10. The PI must report the results of the project, including publications and presentations, so PSI can track the outcomes of all funded projects. Subsequent applications will not be considered unless the previously funded research project has met all reporting requirements.

11. Where papers are published or presented, reprints or copies must be submitted to PSI. Please note that you may send electronic copies by email rather than paper copies.

12. Grant funds must be used according to the approved project budget; however, PSI understands that the Principal Investigator is the best judge of the use of the funds awarded and may propose a change in the use of the grant funds, except where the Foundation has specifically excluded an expense item from its funding. **Please note: the PI must notify PSI of any significant changes in the project budget before the change is made to ensure the proposed changes meet PSI’s eligibility criteria.**

13. A statement of disbursement of the funds awarded must be submitted to PSI at the completion of the project. In projects that exceed a year in duration an accounting at the end of each twelve month period is required as well as the final accounting at the end of the granting period.

14. When work is completed, or cannot be continued for any reason unused funds must be immediately returned to PSI.”

15. “The principal investigator must notify PSI of any leave to be taken, apart from ordinary vacation, in order to make adjustments as applicable to the status of the study and to the payment of the funds. PSI must be notified before the leave starts. In the case of maternity/paternity leaves, the PI may request an extension to the granting period of up to one year. The request for an extension must be endorsed by the appropriate institution officials, in order for adjustments to be made to the granting period and reporting and payment schedule. During the absence of the principal investigator, another investigator with an academic appointment at the same university (or institute) as the principal investigator may be given the responsibility of monitoring the project, supervising the personnel working on the project, as well as act as signing authority for the grant. Please note that the arrangement must be outlined in writing to PSI from the original PI, the replacement PI and the sponsoring institution.

16. All publications and presentations arising from the funded project are to include acknowledgement of funding from "PSI Foundation". Furthermore, PSI's logo should be included whenever possible. An electronic file of the logo is available on the website.

Contact Us

Please contact us at 416.226.6323 or by email at psif@psifoundation.org to discuss any questions you may have about submitting an application for funding.”

Appendix 3: Physician's Power to Protect Pre-Training Survey



Name: _____

Date: _____

Please circle your answer for multiple choice questions

1. What is your definition of child sexual abuse?

2. How pervasive is the issue of child sexual abuse?

- | | |
|---------------------|----------------------|
| a. 1 in 20 children | b. 1 in 100 children |
| c. 1 in 6 children | d. 1 in 50 children |

3. What would you consider are some physical signs of child sexual abuse?

4. What would you consider are some behavioral signs of child sexual abuse?

5. How would you describe your ability if talking to a child about sexual abuse:

- a. I am comfortable talking to the child but not competent talking about the subject
- b. I am competent talking about the subject but not comfortable talking to the child
- c. I am neither competent nor comfortable
- d. I am both competent and comfortable

6. How comfortable are you talking to a caregiver about child sexual abuse?

- a. I am comfortable talking to the caregiver but not competent talking about the subject

- b. I am competent talking about the subject but not comfortable talking to the caregiver
- c. I am neither competent nor comfortable
- d. I am both competent and comfortable

7. Define a mandated reporter:

8. Do you know when, how, and to whom a suspected child sexual abuse case should be reported?

When:

How:

To Whom:

9. Can you name an organization who can help a child who has experienced child sexual abuse?

10. In your opinion, what can the medical community do to address the issue of child sexual abuse?

11. Has child sexual abuse affected your life in any way?

- a. Yes
- b. No

12. What is your motivation for taking this course?

Appendix 4: Physician's Power to Protect Post-Training Survey

Name: _____

Date: _____



Please circle your answer for multiple choice questions

1. What is your definition of child sexual abuse?

2. Do you know when, how, and to whom a suspected child sexual abuse case should be reported?

When:

How:

To Whom:

3. What are some behavioral signs of child sexual abuse?

4. How has the course affected your ability to talk to a caregiver about child sexual abuse?

- e. I am now comfortable talking to the caregiver but not competent talking about the subject
- f. I am now competent talking about the subject but not comfortable talking to the caregiver
- g. I am neither competent nor comfortable now
- h. I am both competent and comfortable now

5. Define a mandated reporter:

6. How pervasive is the issue of child sexual abuse?

- | | |
|---------------------|----------------------|
| b. 1 in 20 children | b. 1 in 100 children |
| c. 1 in 6 children | d. 1 in 50 children |

7. Name an organization who can help a child who has experienced child sexual abuse?

8. How has the course affected your ability to talk to a child about sexual abuse?

- e. I am now comfortable talking to the child but not competent talking about the subject
- f. I am now competent talking about the subject but not comfortable talking to the child
- g. I am neither competent nor comfortable now
- h. I am both competent and comfortable now

9. What are some physical signs of child sexual abuse?

10. In Lesson 1: Child Sexual Abuse: The Basics, I learned more information than I previously knew about the subject.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

11. In Lesson 2: Detecting Child Sexual Abuse, I learned more information than I previously knew about the subject.

Strongly Agree Agree Neutral Disagree Strongly Disagree

12. In Lesson 3: Communicating Child Sexual Abuse, I learned more information than I previously knew about the subject.

Strongly Agree Agree Neutral Disagree Strongly Disagree

13. In Lesson 4: Reporting and the Legal System, I learned more information than I previously knew about the subject.

Strongly Agree Agree Neutral Disagree Strongly Disagree

14. In Lesson 5: Providing Resources, I learned more information than I previously knew about the subject.

Strongly Agree Agree Neutral Disagree Strongly Disagree

15. Do you have any comments or suggestions on the course structure:

16. Do you have any comments or suggestions on the course lecturers:

17. Would you recommend this course as an effective tool to prevent child sexual abuse?

- a. Yes
- b. No
- c. Not sure

Appendix 5: External Reviewer Form

Form for External Review of the Grant Proposal - Paula Walker King, M.D.

1) The proposal is responsive to the RFA (request for applications).

1	2	3	4	5
() Strongly disagree	() Disagree	() Neutral	() Agree	() Strongly agree

2) Comments about suggestions/improvements that can be made.

3) The proposal is well thought out and theoretically sound.

1	2	3	4	5
() Strongly disagree	() Disagree	() Neutral	() Agree	() Strongly agree

4) Comments about suggestions/improvements that can be made.

5) The PI makes a compelling case that the proposed research is necessary.

1	2	3	4	5
() Strongly disagree	() Disagree	() Neutral	() Agree	() Strongly agree

6) Comments about suggestions/improvements that can be made.

7) The PI makes a compelling case that she can accomplish what is proposed.

- | | | | | |
|--|-----------------------------------|----------------------------------|--------------------------------|---|
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> Strongly disagree | <input type="checkbox"/> Disagree | <input type="checkbox"/> Neutral | <input type="checkbox"/> Agree | <input type="checkbox"/> Strongly agree |

8) Comments about suggestions/improvements that can be made.

9) The proposed research is innovative and sets the groundwork for future work in this area.

- | | | | | |
|--|-----------------------------------|----------------------------------|--------------------------------|---|
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> Strongly disagree | <input type="checkbox"/> Disagree | <input type="checkbox"/> Neutral | <input type="checkbox"/> Agree | <input type="checkbox"/> Strongly agree |

10) Comments about suggestions/improvements that can be made.

Thank You! I appreciate your help with this external review process.

Name