

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Project Title:** Web-based Parenting Intervention for Mothers of Infants at Risk for Maltreatment

**Principal Investigator:** Kathleen Baggett

**Number:** 1R01HD064870-01A1

**Description:** Parents of infants living in poverty are at significantly elevated risk of a host of detrimental outcomes, including the development of child behavior problems, neglect and abuse of children, child learning problems and parental substance abuse. Research has found that early interventions to improve parenting practices were effective to improve these outcomes. Yet, there exist major obstacles to the effective delivery of mental health services, particularly in rural areas. The need of rural families for mental health services is reaching crisis proportions due to the lack of trained professionals. In addition, the dramatic rise of Internet use has created a new avenue for people to communicate and share ideas. These two trends are helping fuel the demand for mental health services and on-line support.

Internet programs can be interactive and provide social support from peers and professionals. Through the use of recent advances in multimedia technology and software as well as the rise of computer networking via the Internet, there now exists an opportunity to provide such monitoring of outcomes and remote contact for rural locations. Prior developmental R34 research ("InfantNet") successfully adapted and pilot tested an existing empirically proven parenting program, for delivery via the Internet, enhanced with weekly professional contact. This research provided 40 mothers of infants 3.5 to 7 months (at enrollment) with a computer, computer camera, Internet connection, and technical training/support for 6 months to evaluate the digital translation. Mother-infant dyads were randomized to Experimental or Computer/Control conditions. Results found significant change with infant-behavioral and positive trends were demonstrated in parenting behaviors. Mothers rated the both computer program and interaction with coaches to be very high. These encouraging developmental research results provide a very good empirical base for a fully powered randomized control trial to test effectiveness.

In its developmental current form, InfantNet successfully delivered the Play and Learning Series (PALS) program to mothers in English. In the current study, we seek to broaden our scope to include monolingual Spanish-speaking Latino families. Using the existing Spanish-language translation of the PALS program as a foundation, we will develop a culturally and linguistically appropriate Infant Net-Spanish intervention delivery tool. In this proposed application using an experimental design, we will evaluate the impact of the interactive Internet parent training intervention as compared to control. After recruiting from Early Head Start program in rural and urban Oregon and Kansas, 200 English- and Spanish-speaking mothers (in 4 cohorts) will be randomized to either the intervention or computer-control conditions. Parent coaches will make weekly, phone calls and email to assist parents with the use of the computer and questions/concerns about the program. Parenting practices will serve as the primary outcome. The proposed randomized control trial design will test the effectiveness of an Internet parenting intervention in effecting parenting behavior.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Project Title:** What Happens Next: Households After a First-time Finding of Child Abuse

**Principal Investigator:** Kristine Campbell

**Number:** 1K23HD059850-01A1

**Description:** The researcher has designed this career development award to support her short-term career goal of gaining expertise in the longitudinal assessment of children and families with a history of abuse and understanding the multi-dimensional effects of our current interventions on these families. Completion of this award will support her long-term goal of becoming an independent clinician-scientist dedicated research that will improve outcomes among children and families with a history of child abuse or neglect. Short and long-term career goals are consistent with the NICHD mission to understand and improve the lifelong health of children and their families. Under mentorship direction, the researcher has developed a multidisciplinary advisory team and didactic program to provide training in quantitative and qualitative research methods, social and economic policy evaluation, and research ethics related to child abuse pediatrics. This training plan is linked to three independent but interrelated research projects, providing a multi-faceted perspective on the experiences of children and caregivers living together after a first finding of child abuse or neglect by Child Protective Services (CPS).

The Project will:

- Examine the association between longitudinal change in household characteristics (social support, financial resources, and home environment) and repeat referrals to CPS and child well-being over the 36 months following a first-time finding of child abuse or neglect using the National Survey of Child and Adolescent Well-Being.
- Compare the short and long-term healthcare utilization of children with and without a CPS finding of child abuse or neglect through linkage of Utah CPS and Medicaid databases.
- Explore the anticipated and unanticipated consequences of CPS involvement in households after a first-time finding of child abuse or neglect through a series of semi-structured qualitative interviews.

Findings from these studies will expand our understanding of the 80% of children who remain with their families after abuse, and will inform future research to reduce recidivism and improve outcomes for children and families living with a history of child abuse or neglect. The multi-disciplinary training supported through this research will strengthen the candidate's ability to provide future local and national leadership in design and evaluation of interventions for children and families after abuse.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Maternal Self-Regulation and Harsh Parenting

**Principal Investigator:** Kirby Deater-Keckard

**Number:** 5R21HD060110-02

**Description:** Harsh reactive and inconsistent parenting is a risk factor for a host of maladaptive socio-emotional and cognitive outcomes for children particularly when these behaviors reach the level of maltreatment. Harsh parenting practices are common, are moderately to highly stable over time, and can be highly resistant to change. Biological and psychological factors alike contribute to this variation between parents, but to date there have been few attempts to integrate these bio-psychological factors into a framework that also focuses on the specific parenting cognitions and negative affect that are thought to be involved.

The aim of the current study is to develop a model of maternal self-regulation that examines individual differences in mothers' executive attention and memory, and emotion regulation skills-measured at the behavioral and psychophysiological levels of analysis-in the etiology of harsh parenting behavior. Researchers will study 150 lower- and middle-income adult (18 years or older) mothers of four- to six-year-old children, with emphasis on recruiting an ethnically diverse sample. Mothers will participate in a laboratory procedure in which behavioral data, brain electrical activity data (EEG), and heart rate activity data (ECG) will be gathered. An additional adult informant (spouse/partner or other knowledgeable individual) will complete questionnaires by mail.

The two major aims of the study include:

- Investigation of the associations between maternal: executive attention/memory/emotion regulation (at the behavioral and physiological levels of analysis), parenting cognitions, negative affectivity, and harsh reactive parenting behaviors; and
- Testing whether the associations between maternal parenting cognitions, negative affectivity, and harsh parenting behaviors are mediated and/or moderated by maternal executive attention/memory/emotion regulation (at the behavioral and physiological levels of analysis).

# Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence

**Title:** Teleconsultation and Quality Review in Child Maltreatment

**Principal Investigator:** Patricia Goede

**Number:** 2R44HD052329-02A2

**Description:** Approximately one million children are physically or sexually abused each year. The actual number of children presenting to medical facilities for abuse examinations is unknown, however, the number is anecdotally increasing.

Specialized clinics in hospitals, Children's Advocacy Centers (CACs) and Children's Justice Centers (CJCs) have been developed in every region to serve the investigative and medical needs of abused children. CACs and CJCs provide the same service, and both are members of the National Children's Alliance. Each clinic, or Center, must perform medical assessments to diagnose and treat the physical aftereffects of abuse, and also document forensic evidence necessary for child protection and possible prosecution. As the only children's hospital with a tertiary care trauma center in the Intermountain West, Utah's Primary Children's Medical Center (PCMC), within the Intermountain Health Care (IHC) system, annually receives and reviews about 1000 child abuse cases submitted from geographically remote locations.

A significant amount of expertise has developed in the field of child abuse medicine within the field of Pediatrics. The American Board of Pediatrics is currently considering a proposal for Child Abuse Pediatrics to become the newest medical subspecialty of Pediatrics, recognizing the need for highly skilled physicians in this area. Recent studies have shown that in certain areas of child abuse, especially in the evaluation of sexual abuse, less experienced physicians and other medical providers may not provide accurate assessments of physical findings. While failing to recognize abuse has significant morbidity and mortality, over recognition and over interpretation has negative child welfare and criminal repercussions that may be equally devastating.

The existing process of child abuse detection and prevention can be improved by providing clinicians and practitioners with secure case communication and collaboration tools. These tools must fulfill the need to create and submit child abuse cases for expert consultation, integrate clinical coding standards (e.g., ICD-9, CPT), manipulate images from multiple sources (e.g., clinical photos, radiographs, histology), preserve archive quality images with non-destructive visual identifiers and protect all information from unauthorized access. These collaboration tools include:

- Clinical case consultation and collaboration (same-time/different-place, different-time/different-place) for geographically remote users
- Customized child abuse prevention workflow designed by Pediatric experts
- Secure methods for storing, processing and sharing, accumulated knowledge
- Built-in mechanisms for privatizing, accessing, and auditing case information

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Missed Opportunities for Diagnosis of Child Maltreatment

**Principal Investigator:** Elisabeth Guenther-Skokan

**Number:** 5K23HD043145-03

**Description:** The researcher is both well prepared and qualified for a K award in mentored patient-oriented research.

As part of her proposed career development plan, she will develop expertise with:

- Use of population-based databases
- Methodology used to probabilistically link such databases
- Advanced statistics necessary for longitudinal data analyses
- The ability to coordinate interventions in the emergency department and assess their efficacy

The researcher will also pursue additional training in the complexities unique to child maltreatment research. Child maltreatment is a leading cause of death in children. Credible evidence suggests that many children who ultimately die as the result of child maltreatment are seen by health care providers prior to their demise. The overall hypothesis of this research proposal is that earlier diagnosis and intervention leads to decreased morbidity and mortality for victims of child maltreatment.

The three specific aims of the project are to:

- Measure the frequency of facility-based health care visits that child maltreatment victims have prior to an accurate diagnosis of abuse being made. A case control experimental design using large population-based databases will be used for this study. State-wide emergency department, inpatient, and Emergency medical Services (EMS) databases will be probabilistically linked to the databases for the Division of Child and Family Services and Vital Statistics to provide a comprehensive assessment of the patterns of health care utilization by abused children prior to the injury or sentinel event that results in a diagnosis of child maltreatment.
- Conduct a longitudinal study, prospectively comparing patient mortality, morbidity, and behavioral measures of child maltreatment victims who had delayed recognition of abuse and neglect and victims with prompt recognition of abuse or neglect.
- Prospectively implement and evaluate the impact of a structured educational program for emergency medical health care providers to improve comfort with and documentation of the diagnosis of physical child abuse.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Child Maltreatment and Honesty

**Principal Investigator:** Thomas Lyon

**Number:** 5R01HD047290-05

**Description:** A team of researchers with expertise in developmental psychology, child and family law, and forensic psychology propose a series of studies to examine honesty in young maltreated and non-maltreated children.

The proposal consists of four interconnected projects to examine:

- Development of children's understanding of concepts underlying honesty, including early conceptions of the distinction between the truth and lies, the evaluation of secret-keeping regarding transgressions, and the evaluation of the obligations underlying promises.
- Determinants of honesty, varying the actions of instigators who may encourage dishonesty and recipient-interviewers who encourage honesty, and assessing characteristics of the child that may have an influence, including maltreatment status, age, and attitudes about honesty.
- Verbal and nonverbal indices of honesty in children who were coached to lie by instigators or encouraged to be truthful by recipients.
- Whether either lay or professional adults are able to distinguish honest from dishonest children.

The research will test hypotheses that maltreated children's understanding is subject to underestimation due to insensitive tasks, that maltreated children's honesty can be increased through various means of truth induction, and that maltreated children's honesty can be discriminated through multidimensional analysis of verbal and nonverbal measures. The research is unique in its potential application to the investigation and adjudication of child maltreatment claims, insofar as it is the first sustained research program to utilize tools for assessing and influencing honesty that are potentially useful to child maltreatment professionals and to examine the utility of those tools in children who are in fact the subject of intervention.

The findings have potential to improve child maltreatment practice and thus to ensure that children who do in fact need protection from maltreatment are detected and their reports believed.

# Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence

**Title:** All Babies Cry: Shaken Baby Syndrome Parent Education Toolkit

**Principal Investigator:** Lisa McElaney

**Number:** 5R44HD061122-03

**Description:** Abusive head trauma or Shaken Baby Syndrome (SBS) is the most common cause of death from child abuse. Hospital-based, parent education programs targeting parents of newborns have been proven effective in reducing significantly the incidence of abusive head injuries.

Massachusetts and eight other states have adopted legislation mandating education designed to prevent SBS. Federal and additional state mandates may be forthcoming. Males - biological fathers, mothers' boyfriends and stepfathers are the most frequent perpetrators of SBS. Infant crying is the most common precursor to incidents of SBS.

Building on preliminary work with the Massachusetts Department of Public Health and The Medical Foundation, Vida Health Communications, Inc. will produce and evaluate *All Babies Cry*, an educational media package for parents of newborns. It includes a media part to be shown to parents in the hospital, and a DVD and booklet to take home, containing explicit demonstrations of strategies for soothing a crying infant and managing parental stress. The media format is expected to appeal to men more than printed material alone.

Research and development activities throughout Phase I and II will include:

- Completing development and production of DVD media in two parts and an accompanying booklet (all in English and Spanish) with formative (Phase I) and summative (Phase II) input from parents and Experts.
- A rigorous evaluation of the effectiveness of the media package in improving fathers' knowledge of infant behavior and parental stress, behavior to reduce and cope with infant crying and to assess and manage their own stress, realistic expectations of their infant's behavior, greater belief in the efficacy of infant soothing strategies, greater perceived ability to implement them, and greater intention to do so.

At the conclusion of Phase II, Vida Health Communications will have a completed educational media package that has been thoroughly evaluated and will meet the requirements of the State of Massachusetts Department of Public Health SBS Prevention Initiative for distribution of all new parents in the Commonwealth. The program will then be adapted as needed to meet other states mandates and marketed nationally.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Community-Level Prevention of Child Abuse & Neglect

**Principal Investigator:** Beth Ellen Molnar

**Number:** 5K01HD053172-04

**Description:** In the United States, it is estimated that 2.9 million reports of abuse or neglect, representing approximately 5.5 million children, were reported to authorities in 2003; more than 65% were further investigated, resulting in 906,000 substantiated cases. Globally, child abuse and neglect were estimated by the World Health Organization to affect 40 million children under age 15, with 57,000 deaths in 2000 attributed to homicide of children.

To date, prevention scientists have made inroads towards family-focused prevention of child abuse and neglect and their associated consequences for child development. Studies have also shown effects that community conditions can have on the health and well being of children and families, dating back several decades. Although many prevention scientists have called for community-level prevention as a strategy to lower rates of child abuse & neglect, few exist; moreover, conceptual frameworks are in their infancy.

This Mentored Research Scientist Development Award (K01) will enable the candidate, a social and psychiatric epidemiologist, to become an independent investigator in prevention science and community-based participatory research. The training components will result in new skills to translate community-level research findings into efficacious preventive interventions, and to conduct effectiveness trials to demonstrate sustained effects on rates of child abuse and neglect as well as on abused or neglected children's emotional and behavioral development. Training will also enable the candidate to effectively work with communities, conducting community-based participatory research to transform neighborhood collective behaviors for the protection of children.

Research studies include:

- Scientific review of community-level child abuse and neglect prevention research and programs
- Multi-level study of neighborhood-level collective behaviors associated with reduced abuse/neglect, and determinants of those collective behaviors
- Specification of unique neighborhood-level factors associated with lower rates of child sexual abuse and fewer mental disorders among abused youth
- Development and pilot testing of a conceptual framework for community-academic partnerships conducting social transformation interventions that strengthen communities for protection of their children.

This work will result in more effective community-level prevention of child abuse and neglect and better emotional/behavioral development of children and adolescents.



# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** 20-Year Intergenerational Longitudinal Follow-up of Females Abused As Children

**Principal Investigator:** Jennie Noll

**Number:** 1R03HD060604-01A2

**Description:** Few longitudinal cohorts span multiple developmental stages and extend across generations. The principal investigators (PIs) have been successful at retaining 96% of a sample of females who experienced substantiated childhood sexual abuse (N=84) and a demographically similar comparison group (N=89) for 20 years; accomplishing comprehensive bio-psychological assessments three times (T1-T3) in childhood/early adolescence, twice (T4 & T5) in later adolescence/emerging adulthood, and once in young adulthood (T6). We have also assessed 91% of all known offspring born to the sample (N=135).

Results generated thus far have contributed substantially to the literature on the long-term sequelae and intergenerational transference of the effects of abuse on female development. An additional follow-up assessment (T7) which would employ new technologies (including remote Web- and PC-based assessment tools) and emerging theoretical models (including geneX environment and hormone models of risk and resilience) will allow us to contribute much, much more. However, in order to produce the most competitive R01 aimed at a T7 follow-up, we must first establish feasibility in piloting emergent, innovative methodologies and ascertain from the sample both the ways in which they can/will participate and the demographic makeup of the offspring sample as it is now comprised. Further, this is a particularly vulnerable population so it is vitally important that we take the time to carefully and sensitively integrate emerging technologies (genetics in particular) into our protocols.

This application seeks to develop innovative methodologies and new technology to advance developmental research and proposes to evaluate the feasibility of utilizing these techniques to accomplish the 20-year follow-up of the longest, ongoing study of the impact of childhood abuse on female development. This feasibility study will set the stage for a highly innovative, competitive R01 aimed at testing comprehensive geneX environment and bio- psycho-social models of risk and resilience throughout development and across generations for females abused in childhood and their families.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Training Social Work Providers: Intervention for Maltreating Families of Infants

**Principal Investigator:** Monica Oxford

**Number:** 1R01HD061362-01A2

**Description:** Child maltreatment has well-established, wide-ranging, and long-term negative effects on children. Most children who have experienced maltreatment and are receiving services through the Child Welfare System (CWS) remain in their homes with their caregivers. While the need for parenting services is extensive, few intervention programs have proven to be efficacious in reducing child abuse and neglect within the CWS population, especially for infants and toddlers. It is essential that social service practitioners within the CWS delivery system are equipped to provide brief interventions to maltreating parents.

This R01 proposal is an evaluation of a training program for social welfare providers to implement a brief attachment theory-based intervention to families who have been investigated for child abuse and neglect by Child Protective Services (CPS).

The program (Promoting First Relationships [PFR]; Kelly, Buehlman, & Caldwell, 2000) will be tested at two levels: through social welfare practice and at the level of outcomes for children and families. Social service providers will be trained to deliver PFR to families under investigation for maltreatment by the Department of Social and Health Services, Snohomish County, Washington State. Subsequently, families under investigation by CPS will be recruited into the study and randomly assigned to the experimental group (receiving the PFR intervention) or to the comparison group (receiving the resource and referral).

The specific aims of this study are to:

- Test the effectiveness of training community social welfare service providers in the use of attachment-based interventions by measuring their pre-training and post-training service provision strategies and interactions with maltreating families.
- Test the effects of a relationship and attachment-based intervention with infants/toddlers of parents identified as maltreating by comparing them to a control group on rates of re-referral to CPS, severity of referral, and foster care placement.
- To conduct a test of the effectiveness of an attachment-based intervention on child well-being by comparing experimental and comparison groups on important outcomes (attachment security, emotional regulation, behavior, and developmental functioning).

# Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence

**Title:** Preventing Medical Neglect of Children in Child Welfare

**Principal Investigator:** Janet Schneiderman

**Number:** 5K01HD057987-02

**Description:** The public's health is compromised because children in the child welfare system have significantly poorer physical health than Medicaid-eligible children not in foster care and do not receive adequate health care services while in the child welfare system. This study develops interventions for caregivers in the child welfare system, as child welfare caregivers are beginning to be recognized as gatekeepers for accessing pediatric health care. The primary goal of the researcher's scientific work is to provide empirically derived knowledge to address medical neglect of children in the child welfare system.

This goal will be achieved by developing:

- A better conceptual understanding of the variables that affect the caregivers' medical neglect of children through exploring both the antecedents and consequences of this neglect (developing a preliminary explanatory model); and
- An intervention for caregivers that addresses the protective and risk factors for medical neglect and increases caregivers' ability to engage in behaviors that lead to better healthcare outcomes for their children.

The researcher aims to:

- Increase knowledge of child neglect, specifically medical neglect.
- Increase conceptual and empirical focus on family dynamics/parenting.
- Develop the ability to utilize a research mixed method approach.
- Develop community-based interventional research skill set.
- Train in the responsible conduct of research.

A four-phase research agenda, in which findings from each phase inform the next research project, will be proposed. The research sites will be in Los Angeles County, one of the largest child welfare systems in the United States. Phase one includes a secondary quantitative analysis of data from an adolescent neglect study to explore the relationship of medical neglect to other types of maltreatment, and to identify differences in caregivers who have children who suffer from medical neglect from caregivers who have children with other types of maltreatment or without reported maltreatment. For phase two, a qualitative study using a semi-structured interview of child welfare caregivers is planned to discover the key factors that influence caregivers' help-seeking, accessing, and using/adhering to pediatric healthcare. Phase three includes a prospective medical chart review using mixed methods to identify factors that predict attendance at return appointments at a child welfare primary pediatric clinic (medical home). Phase four will include a qualitative study of caregivers, pediatricians and child welfare professionals to identify factors likely to influence the feasibility and acceptability of interventions (derived from the conceptual model developed in phases 1-3) directed at caregivers to decrease medical neglect.

# **Descriptions of NICHD-supported Research Projects and Training Grants Related to Child Abuse, Child Maltreatment, and Violence**

**Title:** Prevention of Child Maltreatment: A Focus on Social Norms and Corporal Punishment

**Principal Investigator:** Catherine Taylor

**Number:** 5K01HD058733-02

**Description:** The researcher's overarching career goal is to contribute to the well-being of children by reducing the incidence of corporal punishment and child maltreatment by becoming an independent and innovative investigator in the field of child maltreatment prevention with a focus on reducing the prevalence of corporal punishment, and becoming a leader in the understudied area of informing, developing and testing the effectiveness of community- and multi-level interventions (e.g., media-based and targeted campaigns) designed to alter social norms related to child maltreatment risk.

To advance this line of research, the researcher will pursue the five training objectives to develop skills in:

- Conducting ethically and culturally competent child maltreatment research
- Qualitative research methods
- Advanced quantitative analytic and survey research methods
- Translational research for developing community-level, social norms interventions
- Academic leadership

Five co-mentors will guide the researcher in meeting the projects objectives with their expertise in child maltreatment research qualitative methods, advanced quantitative methods, social norms research, and academic leadership. These mentors will provide individualized guidance throughout the researcher's career development and research plans.

The research plan has three specific aims to:

- Assess the effects of prior intention efforts to change social norms relevant to child maltreatment risk and/or parents' use of corporal punishment.
- Explore issues relevant to informing theory, instrument, and intervention development regarding corporal punishment use and child maltreatment risk.
- Explore associations and variations between perceived social norms about corporal punishment, related constructs, and use of corporal punishment.

Follow-up applications will be prepared to conduct population-level norms assessments and to develop and test an innovative community- or multi-level intervention designed to reduce use of corporal punishment and prevent child maltreatment.