

**Exploration of the Objective Diagnosis, Treatment and Prevention of Child Abuse and Neglect**  
**Clendening Summer Fellowship Proposal**  
**Paul Teran KUSOM 2015**  
**February 13, 2012**

**Introduction**

For the 2012 Clendening Summer Fellowship, I propose a project that will explore the objective diagnosis, treatment and prevention of child abuse and neglect. There will be three main focuses as I learn more about how physicians can confront child abuse. First, this project will include a review of pertinent medical literature, laws regulating medical professionals, and best practices for first responders to child neglect and abuse. Second, I will observe Dr. James D. Anderst in his daily clinic and rotations at Children's Mercy Hospital. Dr. Anderst is a Board Certified Child Abuse and Neglect Pediatrician at Children's Mercy Hospital, and he has made the commitment to serve as my mentor for this fellowship. Third, I will participate in research with Dr. Anderst to establish criterion validity of an assessment tool used to objectively diagnose levels of neglect. The compilation of these three efforts will provide me with a thorough knowledge of how physicians play a role in diagnosing, treating and preventing child abuse. The information gathered over the course of this fellowship will be presented in a report for the Clendening Summer Fellowship and the research I participate in will be continued to completion in hopes to make an impact on the objective diagnosis of child abuse and neglect.

**Background**

Before medical school, I had several jobs working with all ages of children. I have worked with high-school athletes at a summer sports camp, incarcerated teens at a detention center and with urban elementary aged children at an after-school program in Kansas City, MO. By working closely with children of all ages and socioeconomic statuses, I learned that child abuse is more prevalent than most people realize. I have developed a deep compassion for victims of child abuse and a personal commitment to learn about meaningful ways that I can respond to these needs.

My wife shares the same determination to help children in horrible situations. This past year we have explored the idea of becoming foster parents with the hope of being able to someday provide a safe, caring and loving home to children in need of care. We have decided that at this point, our lives are too hectic to provide a child with the care and attention they need. Still, we know that our commitment to this endeavor is solid and we plan to one day be foster parents and help children heal from trauma, like that experienced with abuse.

As a future physician, I will have a skill-set and a platform to be a first-responder and advocate for abused children. I do not know what kind of residency or specialty I will pursue, but I know that the skills I learn from working with Dr. Anderst will be valuable in equipping me to respond and care for needs of patients who have experienced abuse.

The Child Abuse and Neglect specialty is a dynamic new direction that the medical profession is embracing. It became a board certified specialty in 2010 after 216 physicians sat for the first board examination in the field in 2009 (Archer). The state of Kansas is also restructuring its child protective services department and policies in hopes to increase the efficiency and effectiveness. This July the Department of Social and Rehabilitation Services and the Department of Health and Environment will merge into the Kansas Department for Children and Families (Kansas). During this decisive time in the field of Child Abuse and Neglect, I believe it would be a valuable learning opportunity to experience a physician's role in recognizing and responding to the crime of child abuse.

I was quick to contact Dr. Anderst when I learned of his specialty and practice at Children's Mercy Hospital. Meeting with him, I gained a greater appreciation of his work and the personal challenges it presents. I was intrigued when he regarded child abuse as a preventable disease. He described to me about the different aspects of prevention, diagnosis and treatment that he is involved in and showed enthusiasm and support for my interest in the area and my commitment to learn more about the subspecialty this summer.

I chose the CSF because of the flexibility that it provides me. I want to explore the clinical aspect of treat child abuse victims. This includes diagnosing and treating child abuse as well as related issues that involve the law, the role of physicians in court proceedings, prevention efforts, parenting seminars and the long-term treatment needs of victims. My involvement in ongoing research in this field will be a contribution to understanding and responding to this significant societal problem not only for me personally but for the medical field as a whole. The combination of clinical experiences and research will expose me to the Child Abuse and Neglect Pediatrics specialty and provide knowledge and skills that I use in my career as a physician and an advocate for patients in my future care.

### **Description**

Dr. Anderst and I decided that a combined clinical and research experience would maximize the knowledge and skills that I can gain from this project. In order to prepare for this experience, I will research Kansas and Missouri policies on the subject and read medical literature on the topic of child abuse and neglect. I plan to gain knowledge of diagnostic techniques and tools and a general knowledge of best practices for physicians confronted with victims of child abuse.

The clinical aspect of my CSF project will involve a variety of experiences. The SCAN Clinic (Sections on Child Abuse and Neglect) at CMH includes four Child Abuse Pediatricians, six Nurse Practitioners as well as social workers and a research coordinator. "The Section aims to advance the evaluation of potentially abused children locally, regionally, and nationally, by fostering excellence in clinical care, research, education, and investigation" (Children's). I will spend time shadowing the physicians in the clinic and on rounds in the hospital. I will learn about the procedures to diagnose abuse and neglect and the steps taken once a diagnosis is made. I will observe as the physicians work to care for the patients and treat all aspects of the injury.

Child Abuse and Neglect physicians are involved in the investigation of abuse cases. I will have the chance to follow Dr. Anderst as he formulates reports and works with the justice system to objectively determine if child abuse were present in a case. This experience will allow me to learn about the differing and collaborating roles of law enforcement, social agencies and physicians. The SCAN clinic is also active in our community with efforts to prevent child abuse and I plan to participate in programs and workshops offered locally to teach parents/caregivers how to properly care for their child and strengthen their relationship with their child (Children's).

All of the aspects of my clinical experience briefly described above will give me insight into how physicians can actively help children who have been abused. In order to formulate an all-encompassing experience, I will also take ownership of a research project for Dr. Anderst. The title is Criterion Validity of the RASS (Rapid Assessment of Supervision Scale). The RASS is a nine question tool designed to increase the objectivity in the assessment of supervisory neglect. It is still in development and I will be validating the efficiency of the RASS so that it can be used in practice. The hope is that physicians, social workers and child protective services workers will be able to use the RASS to quantify the amount of supervision a child had during an injury. This summer I will take responsibility for this research project and continue it until completion. This will involve distribution of the RASS to potential end-users, data collection, statistical analysis, and the formulation of a formal report.

## **Timeline**

February-May	Finalize forms needed to work at Children's Mercy Hospital
May 11	End of Academic Year
May 14-June 3	Research state and federal policies and tools that are relevant to treating child abuse and neglect in Kansas City
June 4-July 27	Work with Dr. Anderst at CMH in SCAN clinic Execute RASS Criterion Validity research project
July 28- August 3	Gather information gained from all aspects of summer experience and formulate a Clendening report.
August 6	Start of Academic Year

## **Methods**

Government policies and community resources pertaining to child abuse and neglect will be obtained from government and organization websites and communicating with local social workers. Medical Literature concerning child abuse and neglect will be reviewed from online databases provided by Dykes Library at KUMC. The collection of data will be an introduction to the field of child abuse and neglect to prepare me to spend the summer with specialists in the field.

I will begin my clinical experience by becoming familiar with the main aspects of the SCAN clinic and then diversify my experience by observing physicians on rounds, working with attorneys and law enforcement and as the physicians take part in preventative programs and workshops. Due to the serious nature of the issues related to my chosen topic, many of the examinations are video recorded for use in the justice system and procedures must be followed precisely. This means that most of my clinical time will be spent observing. However, I will actively participate in the clinical scenarios in which I am allowed. I am in contact with the Medical Student Coordinator at CMH and have begun filling out forms required for my time spent at CMH.

The research project will be a case-control retrospective review to determine the criterion validity of the RASS. A modified Delphi technique was previously used to create the contents of the RASS. The RASS has previously been tested to assess for agreement in the assessment adequacy of supervision in episodes of supervision from actual case data. The end-users in this testing were blinded to the child's actual injury status. Moderate to good agreement was found.

In order to establish criterion validity of the RASS, the injury status must be unblinded. I will present potential end-users with the RASS and actual case data from a collection of past cases (including child's injury statistics). The end-users include physicians, hospital/clinic social workers, and child protective services workers. They will fill out the RASS for each case. A higher score on the RASS indicates poorer supervision. The completed assessments will be collected and I will statistically evaluate the data. Associations of injury status with mean score (continuous variable) on the RASS and category of supervision adequacy (categorical variable) will be assessed with the Pearson correlation coefficient and the chi-squared test, respectively. Our hypothesis is that both higher mean scores and higher categories of supervision adequacy (indicating poorer supervision) will be associated with child injuries (Anderst).

I will continue the research to completion and present the data collected in a formal report. Although I have no significant previous research experience, I will be taking full responsibility for the execution and completion of this project. I will come across obstacles and have questions. Dr. Anderst and his research coordinator will work with me throughout the summer and help me develop a foundation of abilities to begin a life time of clinical research.

I plan to start the research aspect of this experience strongly at the beginning. I will start the summer with about 20 hours each week dedicated to research, and about 20 hours spent in clinic with the physicians. Over the course of the summer I will gauge the demands of the research in hopes to spend more time each week in clinic. I am excited for this amazing opportunity to be mentored by an expert, learn about the intriguing subspecialty and to gain skills that I will use the rest of my life. This will be a valuable learning experience for me that will propel me further into a lifetime of being an advocate for abused children.

**Contacts:**

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**Budget**

<b>Housing/Utilities:</b>	\$400 x 3 months	= \$1200
<b>Food:</b>	Estimated \$500 for 12 weeks of summer	= \$500
<b>Gas:</b>	Estimated \$80 for CSF related transportation in KC	= \$80
<b>Miscellaneous:</b>	Research materials, printer ink and unexpected needs	= \$50
<b>Total:</b>		<b>= \$1830</b>

Thank you for considering my proposal for a 2012 Clendening Summer Fellowship.

## **Bibliography**

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## Appendix A



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2401 Gillham Road  
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February 6, 2012

To Whom It May Concern:

This letter is in reference to Paul Teran, medical student at the University of Kansas. Paul and I have been communicating over the past few months regarding Paul's interest in the field of Child Abuse Pediatrics. Paul and I met and discussed the basic tenets of the field, and how he could learn more about research, clinical care, and child advocacy during a summer project.

Paul expressed sincere interest in all aspects of the field. Together, Paul and I have identified a research project, entitled, "Criterion Validity of the RASS (Rapid Assessment of Supervision Scale)," which is feasible in a relatively short period of time. This project, along with exposure to the multiple clinical and advocacy roles in Child Abuse Pediatrics, will provide an introduction to research and clinical issues.

I fully support Paul's efforts in his work, and am hopeful he can join us this summer.

Please contact me if I may be of further assistance.

Jim Anderst, MD, MSCI  
Section Chief, Section on Child Abuse and Neglect  
Children's Mercy Hospitals and Clinics  
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## Appendix B

FIGURE 1 RASS and Instructions for Use.

Instructions: Please rate each component individually, but in the context of all the other components. For example, the risk due to an individual child's age/development can only be determined in the context of other components, such as proximity of supervising caregiver and inherent dangers of the child's environment. A pot of boiling water sitting on the ground poses a higher risk to a mobile toddler than an immobile infant. The ratings for these components are interdependent, but must be rated individually.

- 0) No risk- component provides no risk of injury to the child
- 1) Minimal risk- component provides only minimal risk of injury to the child
- 2) Possible risk –component raises the possibility that injury to the child may occur
- 3) Moderate risk- component strongly suggests risk of injury to the child
- 4) High risk- component indicates significant risk of injury to the child

<u>Component</u>	<u>No Risk</u>	<u>Minimal Risk</u>	<u>Possible Risk</u>	<u>Moderate Risk</u>	<u>High Risk</u>	<u>Not Available/Applicable</u>	
Child's Age	0	1	2	3	4	NA	
Child's Development/ Maturity/ Skill Level	0	1	2	3	4	NA	
Physical, Mental, and Emotional Capabilities of the Caregiver	0	1	2	3	4	NA	
Responsibilities Given to the Child Were Age Appropriate	0	1	2	3	4	NA	
Level of Supervisory Attention Paid to the Child (visual, auditory, neither)	0	1	2	3	4	NA	
Proximity of Supervising Caregiver (Touching, Within Reach, Beyond Reach)	0	1	2	3	4	NA	
Continuity of Supervision Provided by the Caregiver (Constant or Intermittent)	0	1	2	3	4	NA	
Length of Time Child Unsupervised	0	1	2	3	4	NA	
Inherent Dangers in the Child's Environment (swimming pools, animals, stairs, etc.)	0	1	2	3	4	NA	
<b>Total Score</b>							
<b>Mean Score</b>							

**Overall Classification of adequacy of supervision**

- No Risk (0)
- Minimal Risk (1)
- Possible Risk (2)
- Moderate Risk (3)
- High Risk (4)

**Notes**