

Summer Student Research Program
Project Description

FACULTY SPONSOR'S NAME AND DEGREE: *Ping-Hsin Chen, PhD; Sue Rovi, PhD; Marielos Vega, BSN, RN; Mark S. Johnson, MD, MPH*

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PROJECT TITLE (200 Characters max):

Early childhood development in relation to intimate partner violence during pregnancy

HYPOTHESIS:

The objective of the study is to assess the effect of intimate partner violence (IPV) during pregnancy on early childhood health from birth to 3 years. We hypothesize that children of abused pregnant women will have poorer health status than those of non-abused pregnant women. Outcome measures are percentile growth, adherence to immunizations, child development, and child abuse and/or neglect.

PROJECT DESCRIPTION (Include design, methodology, data collection, techniques, data analysis to be employed and evaluation and interpretation methodology)

Although CDC has suggested the need for research on the association between IPV beyond pregnancy and childrearing outcomes, there have been few studies on growth and development of infants born to abused women. This study will use a retrospective matched cohort study design to explore the long-term effects of IPV on early childhood health from birth to 3 years.

We will analyze data from electronic and paper chart reviews of a random sample of 1,500 pregnant women who were seen between 1999 and 2004 at an urban university affiliated prenatal clinic, and who gave birth at the on-site hospital, and whose newborns were patients at on-site pediatric clinics. All pregnant women were screened for IPV at their first prenatal visit and annual/postpartum visit. We will randomly select abused pregnant women and each victim will be matched to 2 randomly selected non-victims on age. We will then link mother and infant charts using the mother's name and birth date. We will compare children of abused women and non-abused women on early childhood health from birth to 3 years. Outcome measures are percentile growth, adherence to immunizations, child development, and child abuse and/or neglect. We will build hierarchical logistical regression models to compare children of abused and non-abused women in each of the 4 outcomes, controlling for potential confounders. Healthy People 2010 has specified improved child health and reduced developmental disabilities as goals and objectives to be achieved by 2010. By identifying children at risk, we can prevent negative health outcomes.

SPONSOR'S MOST RECENT PUBLICATIONS RELEVANT TO THIS RESEARCH:

Chen P-H, White HR. "Gender differences in adolescent and young adult predictors of later intimate partner violence: A prospective study," *Violence Against Women*, 10:1283-1301, 2004.

Chen P-H, Rovi S, Vega M, Jacobs A, Johnson MS. "Screening for domestic violence in predominantly Hispanic clinical settings," *Family Practice*, 2005, eprint, pp.1-7. doi:10.1093/fampra/cmi075.

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Chen P-H, Rovi S, Washington J, Jacobs A, Vega M, Johnson MS. "Randomized comparison of 3 methods to screen for domestic violence in family practice." *Annals of Family Medicine*, 2007; 5:430-435. DOI: 10.1370/afm.716.

Chen P-H, Rovi S, Vega M, Jacobs A, Johnson MS. "Relation of domestic violence to physical and mental health among Hispanic women," *Journal of Health Care for the Poor and Underserved*. 2009; 20: 569-582.

Gandhi S, Rovi S, Vega M, Johnson MS, Ferrante J, **Chen P-H.** "Domestic violence and cancer screening compliance." *Journal of the American Board of Family Medicine*. In press.

IS THIS PROJECT SUPPORTED BY EXTRAMURAL FUNDS?

Yes or No

(IF YES, PLEASE SUPPLY THE GRANTING AGENCY'S NAME)

NICHD

THIS PROJECT IS: Clinical Laboratory Behavioral Other

THIS PROJECT IS CANCER-RELATED

Please explain Cancer relevance

THIS PROJECT IS HEART, LUNG & BLOOD- RELATED

Please explain Heart, Lung, Blood relevance

THIS PROJECT EMPLOYS RADIOISOTOPES

THIS PROJECT INVOLVES THE USE OF ANIMALS

PENDING **APPROVED** **IACUC PROTOCOL #**

THIS PROJECT INVOLVES THE USE OF HUMAN SUBJECTS

PENDING **APPROVED** **IRB PROTOCOL # M 0120080249**

THIS PROJECT IS SUITABLE FOR:

UNDERGRADUATE STUDENTS ENTERING FRESHMAN
SOPHOMORES ALL STUDENTS

THIS PROJECT IS WORK-STUDY: Yes or No

**THIS PROJECT WILL BE POSTED DURING ACADEMIC YEAR
FOR INTERESTED VOLUNTEERS?:** Yes or No

WHAT WILL THE STUDENT LEARN FROM THIS EXPERIENCE?

The student will:

- (1) learn about IPV and its impact on children's health through a selected review of the literature produced by the sponsors.
- (2) learn how to abstract medical records.
- (3) have an opportunity to participate in the development of future research projects.