

DESCRIPTION: See instructions. State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project (i.e., relevance to the **mission of the agency**). Describe concisely the research design and methods for achieving these goals. Describe the rationale and techniques you will use to pursue these goals.

In addition, in two or three sentences, describe in plain, lay language the relevance of this research to **public** health. If the application is funded, this description, as is, will become public information. Therefore, do not include proprietary/confidential information. **DO NOT EXCEED THE SPACE PROVIDED.**

LONG-TERM GOAL: to estimate the effects of income inequality on social capital and health. A growing concern in public health centers on the harmful effects of income inequality on health. Income inequality erodes social capital—trust, safety nets, and norms of reciprocity that enable people to act collectively to protect health. Pitted against this view is a second one that emphasizes the direct protective role of personal income on health that works independent of income inequality or social capital. To date, most research on income inequality and health has relied on secondary, observational data from adults in large geographic units of developed nations and has produced inconclusive results. **SPECIFIC AIMS:** to obtain more precise estimates, a multidisciplinary team proposes to: 1) do preliminary test of hypotheses, 2) estimate magnitude of attrition, 3) identify adverse effects, and 4) pilot test methods to measures stress, a path by which inequality presumably affects health. **RESEARCH DESIGN AND METHODS:** Researchers will pilot test the use of an experimental research design that changes parental income and village income inequality in a foraging-farming society of Amazonian Indians in Bolivia (Tsimane'). Researchers will assess the short-run effects of the intervention on perceived and objective indicators of general child and adult health. Objective indicators include bio-markers (CRP, hemoglobin, blood pressure, cortisol) and anthropometric indices of nutritional status. Lotteries with rice as a prize will be held in 20 villages for 50% of households in the bottom half of the income distribution; in another 10 villages, researchers will increase income by the same percent among all households. 10 villages will serve as controls. In each household, researchers will select at random one of the two household heads to receive the prize. It is hypothesized that lowering income inequality by raising the income of the poor will produce ambiguous effects on social capital and that income transfer to the poor will enhance parental and child health by improving food intake and energy balance, particularly when transfers go to female heads. Surveys will be done three times: before the intervention and ~ 3 and 12 months after. Research will last 24 months and start on 4/2006. **RELEVANCE TO PUBLIC HEALTH:** through an experimental research design, the study contributes to a vibrant debate in progress about the relative weight of individual resources, inequality, and social capital in shaping individual child and adult health.

PERFORMANCE SITE(S) (organization, city, state)

Northwestern University, Evanston, IL

Department of Beni, Bolivia

Brandeis University, Waltham, MA

KEY PERSONNEL. See instructions. *Use continuation pages as needed* to provide the required information in the format shown below. Start with Principal Investigator. List all other key personnel in alphabetical order, last name first.

Name	eRA Commons User Name	Organization	Role on Project
William R. Leonard, PhD	wleonard	Northwestern University	Principal Investigator
Jere R. Behrman, PhD		Univ. of Pennsylvania	Consultant
Ricardo A. Godoy, PhD	godoypi	Brandeis University	Co-Investigator
Elizabeth Goodman, MD	goodmanpi	Brandeis University	Consultant
Tomas Huanca, PhD		Brandeis University	Consultant
Thomas W. McDade, PhD		Northwestern University	Co-Investigator
Susan Tanner, PhD		Northwestern University	Post-doctoral Fellow

OTHER SIGNIFICANT CONTRIBUTORS

Name	Organization	Role on Project
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Human Embryonic Stem Cells No Yes

If the proposed project involves human embryonic stem cells, list below the registration number of the specific cell line(s) from the following list: <http://stemcells.nih.gov/registry/index.asp>. *Use continuation pages as needed.*

If a specific line cannot be referenced at this time, include a statement that one from the Registry will be used.

Cell Line

Disclosure Permission Statement. Applicable to SBIR/STTR Only. See SBIR/STTR instructions. Yes No