A Program of
Southeast Pediatric Environmental Health Specialty Unit at Emory University
Innovative Solutions for Disadvantage and Disability

The Southeast PEHSU and ISDD invites students from a variety of disciplines in universities and colleges to participate in our 2016-2017 Annual Break the Cycle program focusing on the environmental and social influences on children’s health, growth and development.

Children who grow up in circumstances of social and economic disadvantage are at greater risk for exposure to adverse environmental factors and are more likely to suffer consequent adverse health and developmental outcomes. Break the Cycle supports an interdisciplinary set of student-driven research projects that creatively explore the environmental and social factors that adversely affect children’s health and well-being, and develop creative ways to reverse this situation to promote improved health and well-being for this group of children and, thereby, Break the Cycle of Environmental Health Disparities (see the diagram below).

Students are required to work with their academic mentors to submit a proposal on how they would develop a project to Break the Cycle. Proposals will be reviewed and a limited number will be selected based on a variety factors including relevance to the cycle of environmental health disparities, creativity, feasibility, and strength of the project plan. Those selected will have the opportunity to work with the Break the Cycle team and with other students from around the country and internationally to see the project through and present their research at an annual conference scheduled for the spring of 2017. There will be monthly conference calls to review projects and provide perspectives and guidance. During these conference calls, faculty and students have an opportunity to communicate and collaborate with their counterparts in other disciplines at other universities. Students will also be required to write a scientific paper on their project which will be published in an international peer-reviewed journal and appear as a chapter in a book.

Since the inception of the Break the Cycle program in 2005, have we partnered with over 30 different university departments in 10 States in the USA as well as internationally, and have supported research for over 100 students. We have had 7 monographs published in international journals and 8 books. In 2012 we completed a survey of past students who rated their experience with Break the Cycle valuable, and many continued to pursue career interests related to their work on their Break the Cycle projects.
We invite students to submit a proposal abstract (form enclosed) by Monday **September 19, 2016.** Proposals received will be reviewed by a Break the Cycle panel and decisions of the panel will be communicated to all applicants by **October 3, 2016.** We are looking forward to working with students and their mentors on the 12th annual Break the Cycle and making this cycle another great success.

Costs of travel and lodging for the student and faculty mentor to the annual conference will be supported by Break the Cycle.

If you have any further questions, feel free to contact me at **lrubi01@emory.edu** or our Project Coordinator, Laura Wells at **laura.wells@emory.edu** and we will be happy to discuss potential projects with you and your students.

Please see the enclosed guidelines for further information.

Best wishes for success.

Thanks.

**Leslie Rubin**

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Break the Cycle is a collaborative interdisciplinary research and training program involving University faculty who mentor graduate and undergraduate students in academic tracks that focus on the impact of environmental factors on children’s health. The target populations are communities where the environmental hazards are related to circumstances of social and economic disadvantage. Each student will be required to develop a project that focuses on reducing or preventing environmental health related illnesses and disorders for children who live in these communities. At the end of the project period the students will present their studies and their findings at a national conference and will be required to write papers on their projects which will then be published in an international journal. Our budget allows us to provide for travel and lodging to the student and mentor for the annual conference and a modest stipend for the student on completion of the project.

Environmental Health Disparities
The diagram below represents how adverse social and economic factors may play out in the environment of a child and the impact that it has on health, development, education and future for the children in low income, underserved and minority communities. Substantial evidence, across a variety of academic and public policy areas, supports the relationships and patterns depicted in the diagram. This is the societal challenge of Environmental Health Disparities. There is no question of the need to interrupt and modify this set of interconnected causal relationships in order to change the course and create opportunities for the children to break out of the cycle. In the big picture, the task is great and the cost is high. However, that does not mean that we cannot make a difference. We feel that even the smallest positive change can make a big difference for an individual, for a family or for a community – indeed, the expectation is that the student projects will have a ripple effect not only on the communities, but also on the careers of the students to prepare them to be better stewards and leaders of our collective future.
Project Guidelines

- University Faculty will identify students who have an interest in this topic area and encourage and support the student in the selection of an idea for research. We are specifically looking for projects that address **environmental factors that adversely affect the health of children living in circumstances of social and economic disadvantage.**

- During the project period there will be monthly conference calls to monitor the progress of the research projects, share ideas and assure that the project is consistent with the spirit of the *Break the Cycle* concept. These conference calls are a requirement of students and their mentors.

- At the end of the project period, the students will have an opportunity to present their projects at a conference in Atlanta which will be open to the public and includes a keynote speaker of national stature.

- The students are also expected to write papers on their projects which will be submitted for publication in an international journal as a monograph of the Break the Cycle projects. The papers will also be published as chapters in a book of student Break the Cycle projects.

- Funding of travel expenses and accommodation will be provided for the student and faculty mentor.

- The progress and careers of the participating students will be tracked to evaluate the impact of their participation in the Break the Cycle Program on their academic or professional careers.

The desired outcome:

- To inspire students from a variety of academic disciplines to explore the relationship between adverse social, economic and environmental factors and the health and development of children and to creatively generate strategies to address the challenges,

- To collaborate with an interdisciplinary team of academic leaders from different universities and colleges to creatively examine the broader issues of this topic area,

- To promote leadership among the students, and

- To encourage faculty of our university partners to promote academic interest and social awareness in children’s environmental health particularly in *Children’s Environmental Health Disparities*
Tentative Time Line of Activity: August 2016 through June 2017

2016
August - September  Announce Break the Cycle 12 to university faculty to invite students to submit proposals
September 19  Deadline to submit abstract for consideration
October 3  Announcement of acceptance of proposals
October 7  First conference call will take place (8:30-10:00am)
Review project topics & expectations of program
Monthly conference calls will be scheduled
October 28  Students finalize description of project
December 2  Second conference call

2016 - 2017
Jan - Feb  Required monthly conference calls with students and their mentors to review progress
– exact dates TBA
March  Students submit PowerPoint presentation for review – date TBA
April 24-25  Conference held in Atlanta
June 30  Completion of 1st draft of papers for publication
July 31  Completion of Project

We invite interested students to develop a creative project to Break the Cycle at any point, and thereby reduce children’s Environmental Health Disparities and promote optimal health and well-being for children and their families. This is the cycle diagram to guide the student in developing creative strategies.

www.pehsu.emory.edu
www.isdd-home.org
http://sustainability.emory.edu
BREAK THE CYCLE OF ENVIRONMENTAL HEALTH DISPARITIES
Reducing Children’s Environmental Health Disparities and Promoting Health Equity for all Children

COMPOUNDING FACTORS
• Limited Educational Services
• Limited Health Care Services
• Limited Social Capital

SOCIAL & ECONOMIC
• Limited Education
• Limited Employment Options
• Limited Empowerment
• Limited Income

RESIDENTIAL OPTIONS
• Limited Choice
• Limited Infrastructure
• Limited Services

RESIDENTIAL CHARACTERISTICS
• Older Houses
• Adverse Environmental Factors
• Adverse Social Factors

HEALTH RISK FACTORS
PREGNANCY VULNERABILITY
• Poor Prenatal Care
• Intrauterine Insults
• Low Birth Weight & Prematurity

PHYSICAL HEALTH
• Neurodevelopmental Disorders
• Asthma & Allergies
• Obesity & Hypertension

MENTAL HEALTH
• Toxic Stress & PTSD
• Substance Abuse
• Violence & Crime

ENVIRONMENTAL IMPACT
• Increased Toxins
• Increased Stress

CYCLE OF ENVIRONMENTAL HEALTH DISPARITIES