

Projects

The following is a list of the research projects available for the Summer 2006 session, along with a brief description of the skill sets interns must possess to qualify for consideration for each specific project. The Program Steering Committee and the Program Director together match accepted interns to mentors/research projects based on skills and interest.

Title of Research Project	Skills Required
E N V I R O N M E N T A L H E A L T H	
<p>Development of Participatory Risk Communication Strategies for Pesticide Exposure: Solving Problems by Making them Real</p> <p><i>Key Words: participatory research, pesticides, risk communication, community-based research, environmental health</i></p>	<ul style="list-style-type: none"> ▪ No previous skills required ▪ Desired Skills: Previous experience in educational programs
<p>Integrated and Participatory Pesticide Risk Assessment: A Model to Assess Vulnerability among Rural Workers</p> <p><i>Key Words: participatory research, pesticides, risk assessment, community-based research, environmental health</i></p>	<ul style="list-style-type: none"> ▪ No previous skills required ▪ Desired Skills: Previous experience in participatory and/or qualitative research.
<p>Documentation of Childhood Asthma among Residents Following Acute Exposure to Sulfur Dioxide: A Case Series</p> <p><i>Key Words: sulfur dioxide, asthma, pediatric, environmental disaster, environmental health</i></p>	<ul style="list-style-type: none"> ▪ Medical training
<p>Enteric Diseases in Mexican Children from Varying Water Sources</p> <p><i>Key words: children's health, environmental risk, water quality indicators, environmental health</i></p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of STATA or other similar statistical analysis program ▪ Excellent scientific writing and editing skills
<p>Human Exposure to Persistent Toxic Substances via Food Consumption in Small Villages along the Madeira River Watershed</p> <p><i>Key Words: persistent toxic substances, mercury, DDT, pesticides, environmental health</i></p>	<ul style="list-style-type: none"> ▪ Basic Portuguese (or at least Spanish) ▪ Previous experience using a chromatograph preferred ▪ Medical Doctors and psychologists are welcome
<p>Effects of Prenatal p'p-DDE Exposure and Breastfeeding on Infant Neurodevelopment</p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of STATA ▪ Excellent scientific writing and editing skills

<p><i>Key Words: DDT, pesticides, pediatric environmental health</i></p>	
<p>Pediatric Cancers in Spain, Argentina and the US</p> <p><i>Key Words: pediatric cancers, environmental epidemiology, environmental and genetic risk factors, environmental health</i></p>	<ul style="list-style-type: none"> ▪ Experience with children with cancer or other serious illnesses and their families; ▪ Basic knowledge of biostatistics and clinical epidemiology ▪ Basic training in pediatric environmental health ▪ Experience or knowledge of questionnaire development
<p>G E N E - E N V I R O N M E N T I N T E R A C T I O N S</p>	
<p>Gender Differences in the Response to Acute High Altitude Exposure</p> <p><i>Key Words: gender, acute high altitude exposure, human physiology, environmental health</i></p>	<ul style="list-style-type: none"> ▪ Basic knowledge of human physiology
<p>Dietary – Gene Interactions for Gastric Cancer Risk and Survival</p> <p><i>Key Words: folate, gastric cancer, epidemiology, gene-environment interactions</i></p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of STATA ▪ Excellent scientific writing and editing skills
<p>O C C U P A T I O N A L H E A L T H</p>	
<p>Presenteism</p> <p><i>Key Words: Presenteism, qualitative research, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience with or knowledge of qualitative research;
<p>Retraining of Workers with Occupational Asthma in Chile</p> <p><i>Key Words: asthma, worker retraining, qualitative research, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience with or knowledge of qualitative research; ▪ Experience in or knowledge of occupational therapy
<p>Prevalence and Incidence of Silicosis Among Workers Covered by the ACHS</p> <p><i>Key Words: silicosis, surveillance, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Epidemiological and / or biostatistical skills
<p>Personal Oxygen Supplementation for Chilean Workers at High Altitude Facilities</p> <p><i>Key Words: high altitude, surveillance, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of ergonomics

<p>Gender, Work and Health: Morbidity and its Association to Night Work, Long Working Hours and Domestic Work among Nursing Personnel in Brazil</p> <p><i>Key Words: shift work, biological rhythms, women's health, stress occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of SPSS
<p>An Collaborative Intervention to Promote Worker's Healthy Habits and Behavior Among Mexican Workers</p> <p><i>Key Words: health behavior, health promotion, epidemiology, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience in or knowledge of questionnaire development ▪ Experience in or knowledge of developing educational activities ▪ Solid biostatistical skills ▪ Ability to conduct clinical examinations
<p>Accelerated Silicosis and the Informal Work Sector – A Cross-Sectional Study among 100 Brazilian Gemstone Artisans: Social, Economic and Health Impacts</p> <p><i>Key Words: silicosis, epidemiology, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Basic knowledge of Portuguese or Spanish ▪ Ability to conduct clinical examinations, interviews, ▪ Ability to analyze data, prepare abstracts and present at scientific meetings ▪ Ability to review the medical literature ▪ Ability to write a scientific paper
<p>Evaluating working and living conditions and biological rhythms of Brazilian healthcare shift workers</p> <p><i>Key Words: shift work, biological rhythms, stress, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience with or knowledge of data analysis (statistics)
<p>Hematologic Profile of Mexican Workers Exposed to Benzene-Toluene - Xylene (BTX)</p> <p><i>Key Words: benzene exposure, organic solvent exposure, hematologic effects, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Experience with or knowledge of statistics and data analysis
<p>Evaluation of Sensitivity to Color Contrast and Vision in Workers Exposed to Organic Solvents. Preliminary Data</p> <p><i>Key Words: organic solvent exposure, ophthalmologic effects, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Knowledge of ophthalmology ▪ Experience with or knowledge of statistical analysis
<p>Neurobehavioral Assessment of Mexican Workers Exposed to Organic Solvents: A Pilot Study</p> <p><i>Key Words: organic solvent exposure, neurological health, occupational health</i></p>	<ul style="list-style-type: none"> ▪ Interest in neurotoxicology and neurobehavioral and neurological evaluations ▪ Experience with or knowledge of statistical analysis
<p>Epidemiology of Musculoskeletal Pain: Psychosocial and Orthopedic Explanations</p>	<ul style="list-style-type: none"> ▪ No special skills required

Key Words: musculoskeletal pain, lower back pain, occupational health

S T I s A N D D R U G U S E

Injecting Drug Use Networks and HIV Risk After Argentina's Social Turmoil

Key Words: Drug use, economic crisis, condom use, qualitative research

- Solid Spanish language skills (both speaking and reading)
- Knowledge of or experience with SPSS and / or
- Knowledge of or experience with ATLAS-T
- Degree in the social sciences (social work, sociology, anthropology, political science, etc.) or epidemiology, with knowledge of or experience in behavioral research.

The "Conocer, Haciendo, Comunicar" Project: Investigating the Cultural Codes of Minorities to Improve Health Care Service Provision

Key Words: minorities, sexual health, qualitative research, health care service provision

- Fluent spoken Spanish
- Basic knowledge of or experience with qualitative research

Motivations for the Use of Condoms during Intercourse among Educated Adolescents in Buenos Aires

Key Words: condom use, adolescent health, sexual health

- Fluent spoken Spanish
- Previous experience with qualitative research
- Social science related degree (psychology, anthropology, social sciences, sociology, etc.)

Post Exposure Prophylaxis in Sexually Assaulted Women

Key Words: sexual assault, post-exposure prophylaxis, STIs, sexual health

- Fluent spoken Spanish
- Basic knowledge of HIV and HBV infections and other STDs

M O L E C U L A R G E N E T I C S

Human Papillomavirus Infections in Malignant Transformation Processes

Key Words: HPV, skin cancer, cervical cancer, immunohistochemistry, molecular genetics

- Knowledge of biostatistics, molecular biology, cellular biology, bioinformatics, writing scientific papers

Paraoxonase Polymorphism as a Susceptibility Biomarker for Environmental and Occupational Exposures

Key Words: paraoxonase, pesticide exposure, biomarkers, polymorphisms, molecular genetics

- Experience or training in PCR methods used for genotyping
- Knowledge of or experience with statistics
- Experience with SPSS or related software
- Experience with data management

<p>The p53 Gene and Protein Expression in Primary Cultures of Oyster Hemocytes</p> <p><i>Key Words: p53, antibodies, gene expression immunohistochemistry, molecular genetics</i></p>	<ul style="list-style-type: none"> ▪ Molecular biology skills
<p>Early Detection of Salmon Meat Contamination with <i>Listeria monocytogenes</i></p> <p><i>Key Words: Listeria monocytogenes, food contamination, molecular genetics</i></p>	<ul style="list-style-type: none"> ▪ Experience with PCR
<p>Early Detection of Salmon Meat Contamination with <i>Saprolecnia</i> spp.</p> <p><i>Key Words: Saprolecnia spp., food contamination, molecular genetics</i></p>	<ul style="list-style-type: none"> ▪ Experience with PCR
<p>Introduction and Enhancement of the Cultivation of Maca, an Andean Tuber</p> <p><i>Key Words: Maca, Andean tuber, nutrition, crops, indigenous peoples</i></p>	<ul style="list-style-type: none"> ▪ Botanical or molecular biology skills
<p>Molecular Techniques Used in Diagnosing Pathogenic Agents of Interest in Microbiology and Mycology</p> <p><i>Key Words: laboratory techniques, microbiology, mycology, molecular genetics</i></p>	<ul style="list-style-type: none"> ▪ No previous training necessary
<p>M E T A B O L I C S Y N D R O M E</p>	
<p>Effects of Nutraceuticals on the Metabolic Syndrome</p> <p><i>Key Words: metabolic syndrome, obesity, nutraceuticals, randomized controlled trial</i></p>	<ul style="list-style-type: none"> ▪ Knowledge of biostatistics ▪ Knowledge of data management ▪ Experience with SPSS or related software