

Who We Are



Lowell Center for Sustainable Production
UNIVERSITY OF MASSACHUSETTS LOWELL

Lowell Center for Sustainable Production

www.sustainableproduction.org

The Lowell Center for Sustainable Production at the University of Massachusetts Lowell uses rigorous science, collaborative research, and innovative strategies to promote communities, workplaces, and products that are healthy, humane and respectful of natural systems. The Center is composed of faculty, staff, and students who work with citizen groups, workers, businesses, institutions, and government agencies.

The Lowell Center has been deeply committed to a broad, global transformation in the way societies obtain natural resources, produce goods from those materials, consume products, and manage wastes. As one of the few academic research centers in the United States focused on sustainable production and consumption, we collaborate in such fields as occupational health, environmental management and science, materials and process engineering, epidemiology, health policy, science policy, chemicals policy, and organizational change.

Department of Work Environment

www.uml.edu/college/she/WE/

At the Department of Work Environment at UMass Lowell, academic home of the Lowell Center, the emphasis is on preventing work-related illnesses, injuries, and deaths simultaneous with the promotion of the health and safety of both the workers and the general environment. Our curriculum focuses on identification, assessment, and prevention of chemical, ergonomic, safety and other hazards to human health. Our concern with the work environment also encompasses the psychosocial stressors of the workplace that affect workers' health and job performance and the employer's productivity.

The Department of Work Environment has formal designation as a **Collaborating Center of the Pan American Health Organization** since 1996. PAHO serves as the Regional Office for the Americas of the World Health Organization (WHO) and is part of the United Nations system.



Mercury Elimination in Hospitals of Ecuador and Mexico

Eliminación de Mercurio en Hospitales de Ecuador y México

Funded by the United States Environmental Protection Agency

A PROJECT OF THE
Lowell Center for Sustainable Production
Department of Work Environment
University of Massachusetts Lowell, USA



IN PARTNERSHIP WITH PROJECT FACILITATORS LOCATED IN ECUADOR AND MEXICO

Institute for the Development of Production and the Work Environment (IFA)
Quito, Ecuador

The Department of Chemical and Biological Sciences, Federal University of Sonora
Hermosillo, Mexico

OVERVIEW

The Lowell Center for Sustainable Production is applying its pollution prevention expertise for the reduction of mercury in Latin American Hospitals. The project team is training hospital staff, environmental health and safety specialists, and university students to conduct pilot projects that will reduce mercury in hospitals located in Quito, Ecuador and Hermosillo, Mexico. The methods and lessons are being used to create a model and how-to guidance for self-directed programs that can be undertaken by other Latin American hospitals.

This project advances the U.S. Environmental Protection Agency's (EPA) strategic plan on healthy communities by reducing chemical risks, with a specific focus on international reduction and elimination of mercury in the healthcare sector. The EPA's incentive to fund international partnerships reflects the fact that mercury pollution does not respect country borders. For example, about one third of all air-deposited mercury in the United States comes from international sources.*

PROJECT OBJECTIVES

The following goals are being accomplished in 2009–2010 through a close collaboration between the Lowell Center, country-based Facilitators and participating hospitals, with support from the Pan American Health Organization (PAHO) and relevant government and non-governmental organizations of Ecuador and Mexico.

- Goal 1.** Assist selected pilot hospitals in Mexico and Ecuador in reducing their use of mercury-containing products and improving their management of mercury-containing wastes
- Goal 2.** Provide Mexico and Ecuador, our host countries, with information on the amount of mercury-containing products and equipment used by hospitals and other healthcare facilities that is reduced as a result of the project
- Goal 3:** Develop technical skills and capacity in Mexico and Ecuador so that this knowledge can be successfully replicated in additional Latin American hospitals.



* Reference: www.fcs.uga.edu/ext/housing/pubs/mercury_show_middle.pdf

Project Partners

Institute for the Development of Production and the Work Environment (IFA)

Quito, Ecuador
www.ifa.org.ec

The Institute for the Development of Production and Work Environment (IFA – Corporación para el Desarrollo de la Producción y el Medio Ambiente Laboral) is a non-government organization. The IFA's mission is to promote occupational and environmental health policies, research, and advocacy in Latin America. The IFA collaborates both nationally and internationally with government agencies, workers' organizations, universities and non-government organization. The IFA's international collaborations include government agencies and universities of Italy, Denmark, Sweden, and the United States. The IFA is one of the key facilitators of the entire Latin American occupational and environmental health network. Currently, the IFA holds the Vice-Presidency of the International Society of Doctors for Environment (ISDE). It is also the National Secretariat of the International Commission of Occupational Health (ICOH). The IFA has organized international conferences on occupational and environmental health that have strengthened the regional collaborative occupational and environmental health network.

Department of Chemical and Biological Sciences of the University of Sonora

Hermosillo, State of Sonora, Mexico
www.uson.mx
www.quimicobiologicas.uson.mx/wb2

The Department of Chemical and Biological Sciences (DCBS) educates quality professionals in chemical-biological disciplines to serve Mexican economic sectors - both the manufacturing and service industries - through generation, application, development, and transmission of knowledge to benefit society. The DCBS is one of oldest academic programs of the University of Sonora, educating many generations of specialists in chemistry, biology, clinical analysis, and food technology. Currently, 881 students are enrolled. The DCBS conducts outreach and networking activities, including the Annual Department's Student Exhibition, the radio program entitled *A Time to Science*, and The Institutional Environmental Health and Safety Program of the University of Sonora (PISSA-UNISON). The PIS-SA-UNISON program has contributed to training and capacity building in the management of chemicals and hazardous wastes in different institutions of the Northwestern Region of Mexico. In addition, the DCBS has institutional cooperation agreements with the State Health Laboratory, the General State Hospital, and Research Center for Food and Development.



PROJECT TEAM MEMBERS

Seated: Dr. Margaret Quinn, PI; Catherine Galligan, Dr. Pia Markkanen
Standing: Dr. Rafael Moure-Eraso, Dr. Clara Rosalia Alvarez-Chavez (University of Sonora), Homero Harari (Work Environment Doctoral Student), Dr. David Kriebel, Dr. Raul Harari (IFA)