# Cultivate

Newsletter of the National Farm Medicine Center

**Winter 2008** 

### **Our Mission**

"To conduct high quality research addressing human health and safety associated with rural and agricultural work, life and environments."

## Auction of Champions raises more than \$200,000

A sold-out Auction of Champions raised more than \$200,000 to improve the health and safety of the farming community in central Wisconsin and across the nation. The annual event, which helps support work of the NFMC, was held Sept. 20 at Clearwaters Hotel and Convention Center in Marshfield. A record 349 guests enjoyed a "Night in the Spotlight," a Hollywood-inspired theme. "The money is used in a variety of ways," said NFMC Director Barbara Lee, Ph.D. "Fifty percent of the Auction proceeds will support the Dr. Dean Emanuel Endowment. We're getting ever-closer to our \$1 million endowment goal." Timothy Boyle, M.D., stepped down after three successful years as Auction committee chair. He has been succeeded by Al Nystrom, president of the M&I Bank - Marshfield Group. The next Auction will be September 25, 2008.

### National FarmMedicine Center.

# NFMC helps shape national action plan for ag safety, health

rue to its name, the National Farm Medicine Center has positioned itself as a leader in establishing a national action plan for systematic reduction of disease and injury among workers in agriculture.

The Farm Center enhanced a working relationship with others who will shape federal programs and industry initiatives when it hosted a meeting of the National Institute for Occupational Safety and Health (NIOSH)-National Occupational Research Agenda (NORA) Sector Council on Agriculture, Forestry and Fishing on Aug. 1-2 at Marshfield Clinic Research Foundation.

"This 30-member council represents diverse interests," said Barbara Lee, Ph.D., co-chair of the sector council. "These people have considerable influence on proposing and implementing strategic goals at a national level, including funding from sources both public and private."

Participants at the meeting, including Ralph Bredl, a Stratford, Wisconsin, dairy producer, represented agricultural business, producers, migrant workers, safety professionals and NIOSH scientists. They drafted strategic goals, which included priorities such as surveillance to enumerate workers' adverse exposures, with special attention to the "vulnerable" because of age, language, migration, culture or disability, said Dr. Lee. Other goals are to reduce farm machinery deaths, musculoskeletal disorders related to repetitive job movements and emerging issues including infectious diseases.



Barbara Lee, Ph.D., and George Conway, M.D., M.P.H., co-chairs of the National Occupational Research Agenda (NORA) Sector Council on Agriculture, Forestry and Fishing. Dr. Conway is director of the NIOSH agriculture program.

**Tractor safety:** The National Agricultural Tractor Safety Initiative met in Marshfield July 30-31 to discuss key findings and next steps in its campaign to reduce tractor-related deaths and injuries, most of which are attributable to overturns. NFMC Research Engineer Mark Purschwitz, Ph.D., coordinated the meeting, held at Clearwaters Hotel and Convention Center, Marshfield, Wisconsin.

Dr. Purschwitz has been heavily involved since the tractor initiative's inception in 2003. He is researching ways to reduce barriers to the retrofitting of rollover protective structures (ROPS) on farm tractors. "Because tractor-related fatalities represent a major proportion of farm deaths in the U.S., the planning we did at this meeting to help prevent those deaths should pay dividends for years to come," Dr. Purschwitz said.

MARSHFIELD CLINIC

Research Foundation

### Agromedicine

The NFMC produced an up-to-date reference that reviews acute and chronic health effects of pesticide exposure on the major body organ systems. This special issue of the NFMC's Journal of Agromedicine is based on work originally presented at the groundbreaking 2002 conference in Washington, D.C. Authors revised, updated, and expanded their presentations. "This is an essential resource for health care and public health practitioners, occupational health professionals and governmental employees dealing with the environment," said Steve Kirkhorn, M.D., M.P.H., editor of the Journal of Agromedicine and medical director of the NFMC. In other Journal of Agromedicine news, Joseph J. Mazza, M.D., MACP, has been named Senior Associate Editor. Dr. Mazza is an Emeritus Research Scientist at Marshfield Clinic, and Associate Editor of Wisconsin Medical Journal.



Edgardo Patricio Ortiz Munoz, M.Sc., professor of veterinary medicine at the University of Guadalajara, Mexico, discusses methods for detecting waterborne viruses with Mark Borchardt, Ph.D. Dr. Munoz spent a month in Marshfield last summer to train under Frances Moore, D.V.M., director, Marshfield Clinic Laboratories Veterinary Diagnostic Services.

### **Stueland Scholar**

James Dosman, M.D., a Canadian physician, teacher and researcher known as an international leader in agricultural medicine, was named the 2007 Stueland Scholar. Dr. Dosman received the award Oct. 31 at Froehlke Auditorium on the campus of Marshfield Clinic-Marshfield Center. Dr. Dosman, who has treated and studied respiratory disease for four decades, will spearhead his sixth international symposium, Oct. 19-23, 2008, on public health and the agricultural rural ecosystem. Dr. Dosman's Canadian Centre for Health and Safety in Agriculture, University of Saskatchewan, will host the symposium.



Presentation of the 2007 Stueland Scholar award (from left): NFMC Manager Marlene Stueland, Michael Stueland, Nancy Stueland-Adamski, James Dosman, M.D., and Sue Dosman.

#### **Visitors**

Jim Westaby, Ph.D., associate professor of psychology and education at Columbia University, visited the NFMC in November to discuss research collaborations. The Wausau native is a national expert in behavioral theory and organizational psychology. Dr. Westaby has worked with Dr. Lee on major projects, including the study of a National FFA safety initiative, and the Safety Training for Employers of Adolescent Farmworkers project. Dr. Westaby has been



Jim Westaby, Ph.D., Columbia University, with March Fitz-Randolph, D.O.

a consultant to a number of organizations, such as the United Nations, Boeing Corporation, Goldman Sachs and Citigroup.

### **Environmental Microbiology**

Steve Foley, Ph.D., helped organize the 67th annual meeting of the North Central Branch of the American Society for Microbiology (ASM) on Oct. 5-6, 2007 at Marshfield Clinic Research Foundation. More than 100 microbiologists attended. Dr. Foley presented a talk titled, "Avian Colibacillosis: Importance and the Development of Control Measures," which focused on work being carried out in his laboratory related to development of non-antimicrobial means to control pathogens. Three members of Dr. Foley's lab presented posters: Lindsay Dorsey (summer student); Donna David; and Pravin Kaldhone. "The meeting provided us a forum to showcase our research and to interact with other scientists in the region in an effort to form collaborations and move our sciences forward more rapidly," Dr. Foley said. "There were a number of posters/talks that related to agriculture and the potential impact on human health."

Roberto Marrero-Ortiz, Ph.D., postdoctoral research fellow, joined Dr. Borchardt's laboratory in October. Dr. Marrero-Ortiz was formerly a science teacher in Puerto Rico. Recently, he completed

his Ph.D. at the University of Arizona, where he evaluated the chemical, physical and microbial water quality of homeowner wells and public drinking groundwater systems in the state of Arizona. Dr. Marrero is working on the survival, transport and die-off of pathogenic viruses, bacteria and protozoa in agricultural settings. This project is a partnership between Marshfield Clinic Research Foundation and the USDA Agricultural Research Service.



Roberto Marrero-Ortiz Ph.D.