Cultivate

Newsletter of the National Farm Medicine Center

Summer 2008

Our Mission

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

Save the Date:

The Auction of Champions will unveil "Shades of Elegance" on Thursday, Sept. 25, 2008, at Clearwaters Hotel and Convention Center, Marshfield.

New Auction Chairperson
Al Nystrom and the planning
committee are working hard to
make this the best Auction ever.
The gala evening will feature
golf trips, a group outing to a
Badgers game, Packers tickets,
jewelry, art, weekend getaways,
home decor and much more,
including the traditional prime
meat packages.

Since the first Auction in 1982, more than \$1.7 million has been raised to support research and outreach on issues that affect farmers and rural residents, including children's safety, food safety and groundwater quality.

For more information, contact Jill Kurszewski at 715-389-5146 or kurszewski.jill@mcrf.mfldclin.edu



MARSHFIELD CLINIC.

Research Foundation

National workshop focuses media on child ag safety, health

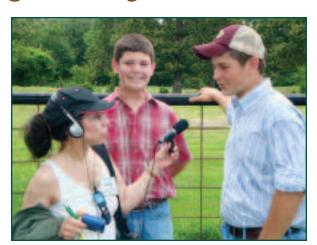
Aworkshop for journalists piloted in central Wisconsin by the National Children's Center for Rural and Agricultural Health and Safety recently conducted its fifth annual edition, drawing media professionals from nine states and Sweden.

"Children and Agriculture: Telling the Story of Hazards and Injury Prevention," helps journalists understand leading causes of childhood agricultural injuries, describes interventions most likely to prevent injuries, and identifies roles for journalists in protecting children in agricultural settings.

The most recent workshop was held June 5 – 6 in Texarkana, with field trips to both sides of the Texas-Arkansas border. The workshop addressed issues affecting children on traditional family farms as well as those of migrant farmworkers traveling through the unique Hope Migrant Complex in Arkansas.

In the workshop's first year, 2004, attendees included Stratford-based Agri-View writer Jane Fyksen, Country Today managing editor and Loyal-area native Scott Schultz, as well as reporters from the Marshfield News-Herald, Hoard's Dairyman and Successful Farming magazine.

"That first group of journalists, and the families who allowed us to visit their farms for field trips, set the tone for future workshops," said workshop director Scott Heiberger. Farmers who hosted field trips included John and Phyllis Kollross, Arpin; Matt Lippert and Dave and Adele Huser, Pittsville; Mike and Deb Hansen, Milladore; and Tom and Jane Hilgart, Auburndale. "They helped us demonstrate the effectiveness of the workshop idea," Heiberger said.



Rosa Morales, journalism instructor at Michigan State University, interviews Levi and Harmon Duke at their family's farm in Hooks. Texas.

Fifty media outlets have sent reporters through the years, including several radio stations and networks. The combined circulation of participating newspapers and magazines exceeds 2.2 million. They include Progressive Farmer, the Portland Oregonian, Arkansas (Little Rock) Democrat Gazette, Lexington Herald-Leader and Spokane Spokesman-Review. One of this year's participants moved on to a reporting job at the Los Angeles Times a few days after the workshop.

The workshop is funded through the National Children's Center with money from the National Institute for Occupational Safety and Health. Each year, 10-12 journalists are selected from among applicants. Workshops have also been held in upstate New York, Washington state and Kentucky. Several projects have spun off the workshop, such as a 20-page booklet written for organizations that might want to adapt the workshop to their own safety and health messages.

NFMC facilitates national farmer/business-driven safety council



Barbara Lee, Ph.D., guided the process that led to establishment of the Agricultural Safety & Health Council of America (ASHCA). The new council, driven by farmer/rancher and agribusiness

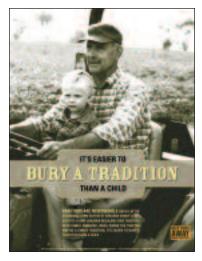
leaders, is the first of its kind in the U.S. to pursue a national strategy to reduce disease, injuries and fatalities in American agriculture. Dr. Lee and NFMC staff provide administrative services for ASHCA. "What's encouraging is the combination of people coming together – farmers and ranchers, organizations that represent them, insurance companies, equipment companies – that all have this common interest and need," said William Nelson, CHS Foundation president and the first elected chair of ASHCA. Organizations represented on ASHCA's Board of Directors include many familiar names: AGCO Corp., American Farm Bureau Federation, Association of Equipment Manufacturers, CropLife Foundation, Workers Compensation Fund-Utah and National Pork Board. The Council's mission: To proactively address ongoing and emerging occupational safety and health issues affecting U.S. agriculture. For more information, go to www.ashca.org.

Agromedicine

Specially-trained nurses will provide agricultural occupational health and safety services to farmers and their families at Marshfield Clinic in Weston and Marshfield, thanks to a collaborative effort spearheaded by NFMC Medical Director Steven Kirkhorn, M.D., M.P.H. The NFMC and Marshfield Clinic Occupational Health Department has partnered with AgriSafe Network to train family nurse practitioners Janice Sozcka and Laurel Hackett as certified AgriSafe providers. Dr. Kirkhorn is on the board of AgriSafe, Inc., and also director of the Clinic Occupational Health Department. AgriSafe is a national organization. Its health professional members receive access to educational materials, contact with other clinicians in the field, and updates on the most cutting-edge developments in agricultural safety and health. AgriSafe Clinics provide education, medical surveillance, respiratory fit testing, and hearing and breathing tests.

Childhood agricultural safety and health

"It's Easier to Bury a Tradition than a Child," the campaign to keep children younger than 12 away from tractors, won regional and national honors from the National Agri-Marketing Association (NAMA). In NAMA Region IV (Wisconsin, Illinois, Indiana, Michigan) the campaign was judged "Best of Show in Public Relations," one of just three "Best of Show" awards chosen from a field of 53 category winners. In the



national contest, the campaign won second place in the Public Affairs/Issues Management category. NFMC Agricultural Youth Safety Specialist Regina Fisher coordinates the "Bury a Tradition" initiative. The Gunter Agency of New Glarus, Wisconsin, served as campaign marketing and design consultant. The official national sponsor of the campaign is the Childhood Agricultural Safety Network, a coalition of 14 national organizations facilitated by the National Farm Medicine Center. Refer to www.childagsafety.org.

Public health microbiology

What makes *Salmonella* an important pathogen? That is one of the questions being studied by members of the research team in the NFMC's Infectious Disease Laboratory. Steven Foley, Ph.D., along with postdoctoral fellows Aaron Lynne and Roberto Marrero-Ortiz, and Senior Research Associate Donna David, is exploring the genetics of *Salmonella* pathogenicity and antimicrobial resistance. Recently, the team found a unique series of genes encoding what is known as a secretion system in a number of highly antimicrobial-resistant strains of *Salmonella*. Secretion systems are known to facilitate the invasion of host cells and the spread of antimicrobial resistance among bacteria. Results were presented at the annual meetings of the American Society for Microbiology and the American Veterinary Medical Association. Ongoing work is being done to see whether strategies can be developed to target antimicrobial-resistant pathogens.

Runoff from animal manure applied to agricultural land can be a major source of pathogens in surface water, leading to potential human health problems. The lab of Mark Borchardt, Ph.D., as part of its work with the Institute for Environmentally Integrated Dairy Management in Marshfield, has developed and validated a method for simultaneously collecting pathogenic viruses, bacteria and protozoa from agricultural runoff water. Sue Spencer, Phil Bertz and Matt Volenec built and used a glass wool filter, providing an inexpensive alternative to current methods for concentrating multiple varieties of waterborne pathogens that require multiple methods or complicated and expensive equipment. Results were presented at the American Society for Microbiology meeting in June. The ultimate objective for this study is to evaluate runoff of pathogens from fields using different manure/crop/tillage management practices.

Visiting scholars



Rajesh Nayak, Ph.D., of the National Center for Toxicological Research, United States Food and Drug Administration, Jefferson, Arkansas, spoke in Marshfield at the invitation of Steven Foley, Ph.D. Dr. Nayak discussed antimicrobial susceptibility testing (AST) of Salmonella.



George Di Giovanni, Ph.D., Associate Professor of Environmental Microbiology at Texas A&M University Agricultural Research and Extension Center at El Paso, gave a presentation in Marshfield on detection of waterborne pathogens. Dr. Di Giovanni was a guest of Mark Borchardt, Ph.D.

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