NIOSH-funded agricultural health and safety programs in jeopardy

By Marc Schenker, M.D., MPH It is time to come together to save agricultural health programs at NIOSH!

At this moment, the fate of federal funding for agricultural health and safety programs at NIOSH is uncertain. Funding has been preserved in the federal budget for 2011, but the program has been proposed for elimination in the 2012 federal budget proposed by the White House. This proposed elimination is unfortunate, but in an uncommon display of unity it has brought together a diverse group of supporters who are working to reverse the proposed cut. Supporters representing the agriculture industry and trade organizations, unions, academic institutions, government agencies and non-government agencies have all expressed support for the agricultural health programs at NIOSH, and for the educational resource centers that were also proposed for elimination. A letter is currently circulating through the U.S. House of Representatives supporting the two programs, and co-sponsored by a Republican and a Democrat. Surely that is uncommon in today's Washington climate, to say the least.

What is it that has sparked a resonant cord in such diverse constituencies? First, the proposed funding cut has highlighted the fact that only NIOSH supports substantial programs to improve health and safety in the agricultural workplace. While some other federal agencies have very limited programs addressing health and safety from pesticide exposures or other narrow issues, none of the federal agencies

other than NIOSH support the broad range of research, training and translational efforts of the NIOSH programs. Second, the hazardousness of agricultural work, as well as work in fishing and forestry, is abundantly clear, and only programs with adequate funding can improve the situation, as they have in mining over the past decades. Whereas occupational fatality rates in mining have fallen dramatically, there has been no such commensurate decrease in agriculture, and occupational fatality rates are four to eight times the rate in all industries combined. Third, while people may disagree on the means to improve health and safety in agriculture, they recognize that the NIOSH programs, and particularly the agricultural health centers, support a wide variety of efforts to achieve the common goal we all seek.

These are true multidisciplinary, regional efforts that involve stakeholders and are focused on translational efforts to improve outcomes for everyone involved in agricultural work. Finally, it is not by chance that the two co-sponsors of the House of Representatives letter, Richard Hanna (upstate New York) and Mike Thompson (Northern California). Both of those locations have established agricultural health centers that have worked with a diverse constituency to achieve their goals.

We all recognize that these are difficult economic times, but we can't retreat from the efforts that most need our support. Being the most hazardous major industry in the country is a dubious distinction, but it isn't a permanent one. With continued



Congressman Mike Thompson (above), who visited WCAHS in 2007, along with Congressman Richard Hanna (upstate New York), supports the efforts of the NIOSH ag health and safety centers.

support for agricultural health and safety by NIOSH, we can reduce the unnecessary burden of occupational illness and injury among our nation's farmers, farm workers and farm family members. It is heartening to see that such a diverse coalition of individuals and organizations agree, and are working to be sure that the effort continues.

We're going electronic!

This means that the Spring 2011 newsletter will be the last issue printed and mailed. In the future, AgHealth News will be distributed by email and will be available on the WCAHS website (http://agcenter.ucdavis.edu). To continue receiving the newsletter, we need your email address. Please fill out and return the enclosed postcard to remain on our mailing list, or send an email request to agcenter@ucdavis.edu.

Presenters Katten and Kegley question regulation of methyl iodide

WCAHS External Advisory Board chair and Monthly Seminar Series Co-chair Bill Krycia of CAL/ OSHA, arranged for our March seminar hot topic, "Health and Environmental Implications of Methyl Iodide Registration as a Soil Fumigant." Since the California Department of Pesticide Regulation's recent re-evaluation of Methyl Iodide as a soil fumigant, regulated in 2007, its upgraded status has made headlines. Guest presenters Anne Katten and Susan Kegley provided an interesting and balanced overview of the data and methodology used to warrant the decision to change its classification.

Methyl Iodide as a soil fumigant is applied prior to planting, just under the ground and then covered with plastic tarps. Its applications are pricey and almost exclusively used for "high value" crops, such as strawberries and broccoli. Critics disagree with the basis of "allowable concentration levels" and its potential harm to growers, workers and groundwater. Based on the knowledge they have, which science supports, Katten and Kegley recommend the state "pull it" and deregulate it.

Questions from the audience included: So what are the alternatives? Dr. Kegley mentioned methods currently used internationally, such as steam, solarization, crop rotation, microbes that target soil nematodes, and new potentially effective pre-plant products from Marrone Bio-Innovations, Arysta LifeScience and AgriTerra, to name a few.

About the presenters:

Anne Katten, MPH, is project director for the California Rural

Legal Assistance Foundation (CRLAF) Advocates for Justice. She is an inustrial hygienist and a tireless supporter of Western Center for Agricultural Health & Safety. Anne has served on the WCAHS External Advisory Board for more than six years.

Anne has worked for 20 years at CRLAF on a wide range of occupational and environmental health issues that affect farm workers and other low-income rural residents. In this capacity, she provides oversight on state pesticide policy by advocating for comprehensive assessment of potential health impacts and for policies to reduce pesticide exposures. Katten has coauthored a number of publications relating to health hazards (risks) associated with farm worker exposures to airborne pesticides. She has also worked on drinking water

contamination and hazardous waste issues in rural communities and has learned directly from workers and residents about their exposures to multiple chemicals both at work and in the home.

Susan Kegley, Ph.D., is the principal and founder of Pesticide Research Institute, and a chemist and senior scientist at Pesticide Action Network North America in San Francisco. Kegley was named a 2008 Tech Awards Laureate, one of 25 global innovators recognized each year for applying technology to benefit humanity and spark global change. Kegley was among hundreds of nominations representing 68 countries.

The video of the March 7, 2011, seminar can be viewed at: http://agcenter.ucdavis.edu/seminar/webcast_2011.php

Visiting scholar from Italy examines musculoskeletal disorders at WCAHS

Gianluca Manuli, a physician and visiting scholar from Pisa, Italy, spent last year working under the direction of WCAHS Director Marc Schenker, researching musculoskeletal disorders. His main focus was studying low back pain, knee pain and hip pain in farm workers, and connecting their health conditions with hundreds of different tasks and variables.

Manuli, who is currently finishing his residency program in occupational medicine at the University of Pisa in Tuscany, said, "The major strengths of Dr. Schenker's study are its size and inclusion of the broad range of agriculture in California, allowing for analysis of different types of farm work. Also, since the term 'farming' suggests many different activities and exposure types, it is therefore a very imprecise description of exposure - very much like many other occupational labels."

After collecting historical information about the different outcomes from diverse farming

tasks, researchers were able to describe which tasks were more involved in the development of musculoskeletal pain.

"The results showed that certain tasks undertaken within 12 months had negative effects on musculoskeletal health. For instance, tractor driving was correlated with hip pain, driving heavy equipment caused an increased restriction of normal activities due to lower back pain, and driving heavy trucks seemed to play a role in the incidence of knee pain," said Manuli. "Moreover, farmers who had little animal contact and farmers who operated fairly large crop-producing farms had a significantly lower risk of knee pain than did farmers in general. On the other hand, mechanical mowing, training, pruning and tying were all associated with increased reports of knee pain. Finally, the handling of animals for 12 months, with tasks including checking, loading, unloading, herding or moving animals was correlated with hip pain."

Dr. Schenker adds that disabilities associated with work-related musculoskeletal disorders is an increasingly serious social problem. Although most injured workers return quickly to work,

a substantial number do not. The costs associated with a chronic disability to the injured worker, their families, employers and society are enormous.



Gianluca Manuli (right), physician and visiting scholar from Pisa, Italy, appears above with Johnny Garcia, a graduate student researcher in the Agricultural and Environmental Chemistry Graduate Group.

Children in the Field topic of WCAHS April seminar presentation

The exact number of children working in agriculture in the United States is unknown. However, some experts estimate hundreds of thousands of children work in our fields. Despite child labor laws restricting the kinds of work teens under age 16 can do in agriculture, they are among the least protected of all working children.

In April, Brandon Louie, California regional coordinator for the Association of Farmworker Opportunity Programs' Children in the Fields Campaign, gave an excellent and informative presentation for the WCAHS seminar. Launched in Washington, D.C., on Dec.14, 1997, the campaign seeks to end exploitation of children working in agriculture.

Since July 2009, Brandon Louie has led the campaign's statewide organizing and advocacy efforts, working currently with a group of students in Dixon whose families are farm workers. Called Students

Together Organizing for Progress (STOP), the group's goal is to promote leadership development, civic participation, community service and self expression and give young people from a migrant or seasonal farmworker background opportunities to share their stories and advocate for the changes that they want to see.

"We currently have about 15 members, and all of them are high school students from either Dixon High School or Maine Prairie High School," said Louie. "The youths themselves are very interested in issues surrounding educational access, social equality, discrimination, immigration and farmworker conditions, amongst many other things."

Louie and his group are collaborating with an undergraduate class at UC Davis taught by Professor Jonathan London in the Department of Community and Regional Development. They are developing a PhotoVoice project



WCAHS April seminar speaker, Brandon Louie (second from right), state coordinator of the Children in the Fields Campaign, is shown here with (from left) Victor Duraj, WCAHS monthly seminar series co-chair; Jose Gutierrez, WCAHS student researcher; Teresa Andres, WCAHS education and outreach specialist; and Dr. Stephen McCurdy, WCAHS director of education.

to raise awareness about issues of particular importance to STOP.

"We have participated in community events like the Dixon Block Party, we took a trip to the State Capitol, we are working with local media outlets and we even met with Assemblymember Mariko Yamada on Cesar Chavez Day."

For more information about Children in the Fields, visit http://afop.org/oremailBrandonLouie at louie@afop.org

Farm Bureau Health and Safety Fair welcomes record 400 attendees

The Western Center for Agricultural Health and Safety was pleased to support the Sacramento County Farm Bureau again this year at its annual Health & Safety Fair. On April 13, 2011, the Farm Bureau along with First 5 of Sacramento and more than 40 area organizations provided health and safety services to farm employees and their fami-

Well equipped and staffed mobile clinics of the Sacramento County DHHS "Smile Keepers" and the Sacramento Valley Optometric Society and Vision Service Plan (VSP) provided their services for hundreds. This year, VSP provided free glasses that were available two weeks after the Health Fair at the same location.

lies in the Sacramento Delta area. The event was held at the Walnut Grove Elementary School in Walnut Grove.

Volunteers offered health, vision and dental screenings, and immunizations for adults and children who may not be able to reach those services on their own. The Sacramento County Sheriff's Department provided fingerprinting and I.D. services, and the Walnut Grove Fire Department held fire extinguisher demonstrations. Woodland Healthcare measured height, weight and body fat content for more than 80 adults.

"This year, we were able to provide much-needed health and safety as well as nutritional services to over 400 attendees at the fair," said Imelda Muzio, program coordinator with the Sacramento County Farm Bureau. "We could not offer this event free of charge without the participation of the Walnut Grove Elementary School's First 5 School Readiness program and organizations such as those listed above, along with the Sacramento Valley Optometric Society and Vision Service Plan, Dr. Norman Spalding of Walnut Grove, Health Net of California and the many other volunteers who donated their time."

2011 Small Farms Conference

Approaching its 30th year, the 2011 California Small Farms Conference was held in San Jose on March 6, 7 & 8 at the Doubletree Hotel. The WCAHS continues to proudly support the conference mission to conduct an educational conference on topics relevant to family farming, direct marketing and issues related to agricultural sustainability. The annual conference provides a venue for small farmers and their supporters to come together to network, attend courses and discuss their concerns.

The California Small Farm Conference has continually gained momentum and attendance. Over the years, an estimated 7,500 attendees have benefited from the short courses, programs, keynote speeches and events.



University of California One Shields Avenue Davis, CA 95616-8757 (AG10)





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AgSafe 2011 Conference celebrates 20-year anniversary

NIOSH Director John Howard was the keynote speaker for the AgSafe 2011 Conference, held in Monterey on Feb. 23. This year's AgSafe Conference exceeded past numbers in attendance, training workshops and sponsorships.

AgSafe is a nonprofit organization composed of individuals, associations and businesses with the shared mission of preventing injuries, illness and fatalities among those working in agriculture. Its goal is to give employers the tools needed to keep employees safe and healthy while continuing to run a profitable, successful business. Established in 1991, AgSafe is celebrating its 20th Anniversary this year. The WCAHS is especially proud to have supported the creation of AgSafe through a NIOSH-funded pilot grant in 1990.



NIOSH Director John Howard (above) was keynote speaker at AgSafe Conference.

Calendar of Events

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Kent Pinkerton, WCAHS associate director, will present "Using Nanotechnology in Agriculture" at WCAHS Seminar Series, 4–5 p.m., Hart Hall, UC Davis Campus

The 2010 WCAHS seminar series is available via video webcast at http://agcenter.ucdavis.edu/seminar/webcast_2009.php