# Building bridges between science and social action

n Dec. 10, 2012, the Western Center for Agricultural Health and Safety hosted a special evening program on campus honoring Don Villarejo. NIOSH Director John Howard, who made a special trip from Washington, D.C., to thank Don for his decades of work involving social justice, and his unwavering quest to promote participation in our democracy, was guest speaker. Other guest speakers who provided heartwarming stories and laughs were: Judith Redmond, Full Belly Farm; Luis Magana, American Friends Services, and Lupe Sandoval. California Farm Labor Contractor Association. Don gives credit for his success to the exceptional support and collaboration of staff members, co-investigators, consultants, members of the California Institute of Rural Studies (CIRS), which he founded in 1977 and directed until his retirement in 1999, and to his wife, Merna, for her partnership and support throughout the years.

"I was trained as a physicist and pursued that discipline for more than a decade. But I found myself increasingly unsatisfied with my work, and eventually realized that an academic career was actually not a good fit. I wanted something more, something that was directly connected to social change. And so I jumped ship. But as a physicist I learned some very valuable skills: analytic problem solving, the importance of objectivity, reliance on direct observation and primary data, hypothesis testing, and quantitative reasoning skills," Villarejo said during his presentation at the event.

"I was seeking to bring the world of ideas and research to the world of political action and social change. By ideas and research, I mean developing information that should rely, as much as possible, on direct observation and primary sources as well as to meet the rigorous tests of contemporary scientific discourse.

"My journey with NIOSH's agricultural health and safety program began in 1990 with the invitation to join Marc Schenker and others to plan for what is now the WCAHS."

Recounting an unexpected turn in 1992, Don participated in the NIOSH-sponsored National Symposium on Childhood Agricultural Injury Prevention in Marshfield, Wisconsin, where he heard Marilyn Adams' presentation concerning the loss of her 11-year-old son who suffocated in a gravity flow wagon of shelled corn on her family's farm.

Ms. Adams' presentation triggered a memory of an

experience Don had as a child when he lived on a family dairy farm for a short time in southern Minnesota. When the silage was harvested and chopped to be blown into the silo using the PTO of a tractor and huge tubing, he was sent into the silo with a pitchfork,

Villarejo continued on page 2



NIOSH Director John Howard met with WCAHS investigators and key staff prior to the special event honoring Don Villarejo. Dr. Howard enjoyed a tour of the UC Davis campus that included stops at the Department of Biological and Agricultural Engineering, the Antique Mechanics' agricultural equipment museum, and the Robert Mondavi Institute of Wine and Food Science. Back row, from left, Dan Tancredi, Victor Duraj, Fadi Fathallah, Paul Leigh, NIOSH Director John Howard, Kent Pinkerton, Frank Mitloehner, and Suzette Smiley-Jewel. Front row, from left, Jay Schreider, Shirley Gee, Teresa Andrews, and Julie Rainwater.

not unusual at that time.

Don recalled, "I was instructed to spread the incoming silage as uniformly as possible and not allow it to pile up below the tubing. But as a boy of 7 years old, I was unable to keep up with the incoming flow, and I couldn't stop the pile-up. And then a miracle happened: the incoming silage plugged the tubing all the way back to the tractor. Suddenly, everything stopped. I was rescued and was safe.

"Although I didn't fully understand it at the time, I learned that everyone who performs crop or livestock production tasks on a farm is at risk of injury or death – whether it is a farmer, an unpaid family worker or a hired worker. All are farmworkers at risk. Today

in Minnesota and other Midwestern states, children under the age 12 are not allowed to work in silos. Nevertheless, in just the past five years, 14 teenage workers have died in silo accidents."

Don's passion remains America's farm laborers, who he knows are a socially vulnerable population: low-income, ethnic minority, mostly recent immigrants, many lack authorization for U.S. employment, having low educational attainment, with limited English fluency and often without any social support.

Under the current direction of Gail Wadsworth, CIRS continues to strengthen social justice and increase the sustainability of California's rural communities.



On Dec. 10, NIOSH Director John Howard (second from right) visited the WCAHS to honor Don Villarejo, founding director of the California Institute for Rural Studies, who has dedicated his life to the safety and health of workers on farms. The fitting title of Dr. Howard's address before 80-plus attendees was: "Passionate Partners are What Makes Government Work (at all)." Guest speakers from left, back row, William Arnold, field representative for Senator Lois Wolk; Guadalupe Sandoval, California Farm Labor Contractor Association; Don Villarejo; Marc Schenker, WCAHS director; and Dr. John Howard. Front row, from left, Don's wife, Merna Villarejo; Judith Redmond of Full Belly Farm; and Luis Magana, chair of the American Field Services Committee.

# Grad students present their research during WCAHS' Jan. 14 seminar

The Western Center for Agricultural Health and Safety's (WCAHS) annual seminar featuring presentations by graduate students Alejandro "Alex" Castañeda and Emily Sousa was held on Jan. 14.



Alex Castañeda's presentation, "Allergic Response to Agricultural Dusts" examined the effects of particulate matter (PM) on allergic conditions in the lungs of mice. He collected PM from agricultural, dairy, urban and rural sites in the Sacramento and San Joaquin valleys. Using the murine intransal sensitization model and the amount of mucous present in the lungs, he and his colleagues were able to identify the degree of allergic airway inflammation after the mice had been exposed to the PM.

Emily Sousa's presentation, "Legal Status, Precarious Employment, and Self-Rated Health in Foreign-Born California Farmworkers (MICASA),"focused on her dissertation work involving precarious employment, documentation status and self-rated health in a farmworker cohort in Mendota. Sousa hypothesizes that workers with fewer legal rights may experience poorer working conditions and employment relations. She hopes to learn how precarious employment and undocumented status may be associated with poor self-rated health among immigrant farmworkers.

# Peaches and pitfalls: experiencing the reality of farm labor

By Fiona J. Scott

Although I was shielded from the August sun by boughs of peach trees laden with fruit, sweat still soaked through my shirt. The orchard was quiet except for the gentle humming of the woman next to me and the sound of peaches being dumped into wooden crates.

I had been at Johl Orchards only a few hours, yet my back ached under the weight of the peaches in a bag slung over my shoulder, and my arms stung with bleeding scratches from the unforgiving branches. Only a few hours earlier, the reality of farm labor was something I could only imagine.



Fiona Scott with her peach-picking bag at Johl Orchards.

As a co-director of the Knight Landing Clinic, a UC Davis student-run clinic in a rural community, I routinely see farmworkers walk through our doors seeking medical care. I thought I understood what being a farmworker was like, but the more I listened to our patients stories, the more I realized I was ignorant to the realities of farmwork.

I had to experience for myself what farmwork was like if I was to truly appreciate the dangerous and physically grueling nature of picking fruit. Lucky for me, I was just in time for the peach harvest.

After emailing the Yuba-Sutter Farm Bureau, I was put in touch with a local peach grower. Several pages of liability forms later, I was 17 feet up a ladder picking peaches and depositing them in a canvas bag strapped to my chest. Everyone working around me was picking at a frenetic pace—their livelihoods depend on how much they pick and how fast. The pay scale here is piecemeal. One crate of peaches, the equivalent of 1,000 pounds, equals a take home pay of \$17.

The other workers at the orchard are shockingly patient with me. I pick with one hand and hold onto the ladder for dear life with the other. I'm happy to provide a source of comic relief to those around me, and indeed I hear muffled whispers of "gringa" and stifled laughter through the canopy of the trees.

A girl about my age, sorts through the peaches in my crate, chucking out the fruit that is too small or bruised. She looks up and sees me struggling and offers words of encouragement.

I climb down my ladder to introduced myself and I tell her about how I hope to learn more about what being a farmworker is like. Her name is Millie, and

she tells me about her work in the orchard, her dreams of becoming a nurse, and she points out various family members working nearby. I'm grateful for the small respite and chug half my water bottle.

I am completely out of my element working in an orchard. The physical demands of picking peaches exceed my wildest expectations. After a long day of backbreaking, sweaty ladder climbing I can pick no more.

I hug Millie goodbye and she slips a yellow plastic 60 1/3 mm grading ring onto my wrist, a tool used to ensure peaches are the correct size. "To remember me by," she says. I sling the peach bag over one shoulder and walk toward the trucks loading fruit for the cannery.

A few days after my peachpickingadventure, I find myself in the produce department of



worker is like. Her An example of a peach-picking ladder.

a fancy Davis grocery store. I stop in front of a huge display of neatly arranged peaches. Rolling one over in my hand, I wonder about the person who picked it. What is his/her life like? What are his/her hopes and dreams? How high up a ladder did he/she have to climb? I glance down at the yellow 60 1/3 ring still around my wrist and I think of Millie.

I learned many things while picking peaches. But among the most valuable, I count my understanding of the difficulties of harvesting peaches and a deep appreciation for those who work long hours and risk injury for \$17.

Fiona J. Scott, MPH, MS(c) is co-director of the UC Davis student-run Knights Landing Clinic, and a member of the UC Davis Graduate Group in Epidemiology. She can be reached at fjscott@ucdavis.edu

Most people don't know that working in agriculture is known to cause arthritis, specifically osteoarthritis, due to repetitive movements and prolonged stress of the joints (CalAgrAbility Data Report, 2009, CAWS, 1999). CalAgrAbility Bilingual Outreach Representatives Maria Ceja and Gloria Anaya, both from farmworker families in the Central Valley, received training and certification through the Arthritis Foundation to become Land Exercise Instructors. With that training, they helped to create CalAgrAbility Keeps You Moving: Bilingual Rural Exercise Program. On Feb. 4, they presented an overview of the program, which includes 10 bilingual exercise classes (Spanish and English) designed to teach rural populations about arthritis, prevention and pain management techniques.

In 2012 CalAgrAbility team members conducted more than 40 classes serving a total of 200 rural families in Yolo, Butte, Glenn, Stanislaus, Sacramento, Sutter, Solano, and San Joaquin counties. Serving rural communities by connecting with agencies such as family resource centers, senior centers, arthritis support groups, community centers, migrant education programs, migrant Head Start, migrant centers, low-income clinics and low-income housing centers. Currently CalAgrAbility has three ongoing monthly venues: Clinica Tepati in Sacramento, and the Fibro Friends Fibromyalgia support group in Vacaville and at the Davis Senior Center.



Pictured above, from left, CalAgrAbility Program Director Martha Stiles, Professor Fadi Fathallah, WCAHS Seminar Series co-chair; and CalAgrAbility bilingual outreach representatives Maria Ceja and Gloria Anaya.

For more information on CalAgrAbility Keeps You Moving: Bilingual Rural Exercise Program and arthritis, please contact CalAgrAbility by phone at (530) 752-1613 or by e-mail at calagra@ucdavis.edu.



### University of California One Shields Avenue Davis, CA 95616-8757

AgHealth News is published quarterly by the Western Center for Agricultural Health and Safety, University of California, Davis CA 95616-8575; phone (530) 752-4050; FAX 752-5047; e-mail: agcenter@ucdavis.edu http://agcenter.ucdavis.edu

Director	Marc Schenker
Assoc. Director	Kent Pinkerton
Director of Education	Stephen McCurdy
Director of Research	Frank Mitloehner
Education/Outreach Specialist Teresa Andrews	
Manager/Editor	Sandra Freeland

# Join the AgHealth e-mail listserver

The Western Center for Agricultural Health and Safety's AgHealth e-mail discussion group is open to anyone interested in agricultural health and safety. We welcome and encourage participation by posting comments or questions about agricultural health and safety. Subscribe at the WCAHS homepage: http://agcenter.ucdavis. edu, click on "AgHealth email List."

## Calendar

#### March 4

**Brian Leahy, J.D.,** director of the California Department of Pesticide Regulation, will present "California's Department of Pesticide Regulation: Future Directions"

## April 1

**Kat Navarro**, 2011-2012 WCAHS Seed Grant Recipient, and **PI John Balmes**, **M.D.**, professor, UC Berkeley and UCSF, will present "Improving Exposure Assessment Methods by Measuring Breathing Rates of Farmworkers"

## May 6

**Stavros Vougioukas,** associate professor of Biological and Agricultural Engineering at UC Davis, will present "Bio & Ag Engineering at UC Davis Update"

All three seminars will be held from 4–5 p.m. in the CHE Board Room, Old Davis Road (3rd gate on the left after crossing the RR tracks)



Grant #2 U54 OH007550-11