

Maternal and Child Health

Spring 2014 Newsletter



CHAMACOS:

*Environmental Exposures and
Children's Health*



School of
Public Health

Berkeley
UNIVERSITY OF CALIFORNIA

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MCH Leadership training grant:

60 years of excellence at UCB



Letter from the Chair

Dear Readers,

The UC Berkeley School of Public Health **Maternal Child Health (MCH) Program** will graduate 13 students this spring. As another great academic year comes to a close and this fresh new cohort of future MCH leaders heads out into the field, we reflect on our 60th anniversary. With the support of the Maternal Child Health Bureau at HRSA we are educating the next generation, strengthening the MCH workforce in our local communities and abroad, and contributing new research to the field for six decades. We are grateful to have achieved so much for so long and have much to share in this issue.

Read on to learn more about the Fall 2014 incoming class; a group of diverse, dynamic, and developing leaders in Maternal and Child Health. Take a trip to the cutting-edge of MCH research through the presentations from our March Symposium on MCH lifecourse concepts and numerous articles from the popular media about our faculty's current projects. Meet our new Program Assistant Diana Stasko, who helped make this newsletter such a visual treat. Catch up with your friends and colleagues in the Alumni Updates section, and don't forget to send us your updates! MCH Program faculty, staff, students, and alumni are continuously contributing to the field in creative, innovative, and strategic ways and we are thrilled to share the latest news with you.

Our community is expanding and making new connections every day, please join us. You can follow us on **Facebook**, tweet us on **Twitter**, and join our **LinkedIn Group for MCH Alumni and program allies**. Keep in touch, let us know how we can support your work, and most importantly, let us know how we can work in partnership with you.

Best wishes,

Sylvia Guendelman PhD, LCSW
Chair, Maternal & Child Health

Warning Signs:

How Pesticides Harm the Young Brain



The pathbreaking CHAMACOS study has detected developmental problems in children born to mothers who toiled in California's treated fields—but will anything change?

Author: Susan Freinkel

Excerpted with permission from The Nation.

Since 1945, the use of pesticides in the United States has quintupled. More than 1 billion pounds of pesticides—a broad term that includes weed killers, insecticides and fungicides—are now used in the United States each year. Over 1,000 chemicals registered to fight pests and pathogens are formulated into some 20,000 products. Most are for agricultural use, but a fifth are designed for nonagricultural applications—in homes and gardens, playgrounds, schools, offices and hospitals.

So it's no surprise that studies show many of us—even newborns—harboring detectable levels of pesticides in our bodies. Yet it's hard to know what that really means for our health. Their mere presence in our systems does not, ipso facto, make for a health threat. Scientists have linked heavy chronic exposure to cancer and birth defects. But what about low-dose continuing exposures—for example, the micrograms that a farmworker might carry home each night on the soles of her boots? Or for those of us who don't work on a farm, the traces that drift from a lawn or golf course, or remain in the dust after a landlord sprays, or that cling to a piece of fruit? (Produce is the main source of exposure for most children in the United States.)

One place where the answers are being worked out is in the Salinas Valley, where for fifteen years researchers have been following several hundred children of primarily Latino farmworkers since birth. The scientists are based at the University of California, Berkeley, but

the hub of the study is in the town of Salinas, in a small tan portable bungalow tucked into a parking lot between the county hospital and county jail. The bungalow is busy almost every day, as the children and their mothers visit for periodic interviews and assessments. The waiting room has comfy chairs, toys for all ages and a TV tuned to Spanish-language programs, since most of the participants are originally from Mexico. Everyone loves a snack from the quesadilla maker in the back.

Maria was one of the study's earliest enrollees: she has been making regular trips here since before Carla was born in 2000.



Children of the CHAMACOS study

The study is known as **CHAMACOS**, which stands for Center for the Health Assessment of Mothers and Children of Salinas. The researchers chose that bulky acronym because it's Mexican slang for "little kids." "It really means something to our participants," says Kimberly Parra, the field-office coordinator who manages the traffic of staff, researchers and families through the bungalow.

Warning Signs

Many appreciate it for more than just the name. Even as the researchers have been trying to unravel the tangled effects of pesticides and other chemicals on children's development, they've been devising practical ways to help the study's participants reduce their risk of exposure—a rare example of community engagement by academic scientists. In a place that's often sharply polarized between those who own the fields and those who work in them, CHAMACOS researchers have insisted on involving all sides. They've worked with growers and farmworker advocates to explore ways to mitigate exposure and have spun off studies to answer questions and concerns in the local community. It's been "a partnership, not a top-down approach," says Asa Bradman, one of the researchers. Recently, after hearing from local daycare centers that they were worried about the pesticides used in their facilities, Bradman launched a series of small studies to investigate the problem and help the daycare centers and their pest-control companies find child-safe methods.

"It's one of the things I find most impressive about their work," says Dan Shapiro, a professor at California State University, Monterey Bay, and a member of CHAMACOS's community advisory board.

That approach is partly a reflection of the study's chief investigator, **Brenda Eskenazi**, a professor of maternal and child health and epidemiology at UC Berkeley. A self-described "child of the '60s," Eskenazi has a longstanding passion for community-based research. She has a Berkeley openness and warmth, but also an ex-New Yorker's sharp edge. With research in Italy and South Africa as well as Salinas, Eskenazi is exhaustingly on the go. Colleagues are used to her phoning in for conference calls from her car.

Read more at: www.thenation.com

This article appeared in the March 31, 2014 edition of The Nation. Reprinted with permission. Produced by the Food & Environment Reporting Network, an independent nonprofit news organization.

Spring Visit Day



On March 17, 2014, Berkeley SPH welcomed many newly admitted graduate students onto campus. The day was packed with different events to expose students to Berkeley life. A student, Sonny Vernard, and a faculty member, Dr. Amani Nuru-Jeter, started off the day with their addresses to admitted students.

Afterwards, the Center for Public Health Practice and the Office of Diversity gave admitted students highlights some of the resources offered to Berkeley SPH students. Admitted students had a chance to connect with current students, staff, and faculty in their respective concentrations through breakout sessions, lunch, and individual advising.

The day ended with campus tours with SPH advisor, Tony Soyka, and a lively SPH Student Government Social at Pappy's Grill and Sports Bar for current and admitted students. MCH had 11 admitted students attend spring visit day. We hope that our newly admitted students enjoyed spring visit day, and that their final decisions will be to attend UC Berkeley's School of Public Health next year!

MCH Research Symposium

Today's Children,
Tomorrow's Adults
Krishna Patel

Building Student-Community Partnerships

Krishna Patel

On March 4, 2014, the MCH program hosted a research symposium to celebrate our 60th anniversary and highlight cutting edge research focused on various stages of the life course, interdisciplinary perspectives, and innovations in Maternal and Child Health.

Four professors in the MCH program at UC Berkeley School of Public Health - Dr. Brenda Eskenazi, Dr. Kim Harley, Dr. Barbara Abrams, and Dr. Sylvia Guendelman - presented about their most current research to an audience of MCH professionals, para-professionals, researchers, alumni, practitioners, and students. Each presentation was followed by a lively discussion with the audience.

Topics included:

Early Exposure to Hormone Disruptors, Obesity and Pubertal Timing (Harley)

Assessing the Health Benefits of Maternity Leave for Mothers and Children (Guendelman)

Early Life Exposure to Chemicals and Effects on Neurodevelopment (Eskenazi)

MPH and DrPH students are learning to connect and build partnerships with community organizations through one of the most SPH popular classes, Evaluation of Health and Social Programs. Taught by MCH professor **Julie Deardorff**, students learn valuable skills associated with evaluation through lectures and class activities. Beyond the classroom, students work with a community-based non-profit organization to create a comprehensive evaluation plan that can be used and implemented by the organization to evaluate their progress and impact in the community. Most organizations are in the Bay Area, but there are a few around California and worldwide.

“The partnership is one of my favorite parts about the class. It makes the class and our school of public health different than others. Being in a professional program, these skills are marketable, exciting, and necessary for our future jobs, fellowships, and internships.”

- Krishna Patel, MPH 2015



Connect with us





Life Course Perspective

Pies Edits February Issue of MCH Journal

In February 2014, the Maternal and Child Health Journal (MCHJ) published a Special Issue on Advancing MCH Life Course. Edited by **Cheri Pies** (Clinical professor of MCH and Director of DrPH program at UC Berkeley) and Milton Kotelchuck (Senior Scientist at MGH Center for Child and Adolescent Health Research and Policy, Professor of Pediatrics at Harvard Medical School), this Special Issue is designed to promote the germination of new and innovative MCH Life Course Perspectives.

It has been ten years since Michael Lu and Neal Halfon published their landmark article on the MCH Life Course Perspective in the MCHJ. Since that time, the work of integrating the life course perspective into the field of maternal and child health has taken off. The Special Issue is divided into six sections – Theory, Local Practice, State Practice and State Policy, Educa-

tion, Domain Commentaries, and Research. Each section contains articles that make an important and thoughtful contribution to the field and provide new ideas and ways of addressing key issues through a life course lens. This compilation of engaging and interesting articles offers practitioners, policy makers, educators, researchers, and others an opportunity to share their best work and creates an important forum for their voices, their work, their successes, and their challenges.

This Special Issue of the MCHJ is a call to action for all of us in MCH and a step forward in our efforts to build an MCH Life Course learning community. You can find the Special Issue through **this link**.

Diana Stasko joins MCH Program Staff



We are thrilled to introduce our newest MCH staff member, Diana Stasko, who joined us in March as our MCH Program Assistant. Diana is an Oakland native and the daughter of a UCB alumnus. She's worked in several administrative and fundraising positions relating to education and women's health; her first job in San Francisco was fundraising for the Women's Needs Center.

Diana graduated from CSU Chico with a degree in fine art and will soon complete an AA in Multimedia from Berkeley City College. Diana brings a wealth of creative talents to our team in addition to administrative and support skills and we are lucky to have her join us.

Deardorff study:

Social adversity, puberty,
and risk-taking
behaviors among
Latino youth

by Niema Jordan
from sph.berkeley.edu



How does social adversity affect the timing of puberty? How do social adversity and early puberty influence risk-taking behavior in teens? **Julianna Deardorff**, assistant professor in the Maternal and Child Health program, recently received a \$2.5 million grant from the National Institutes of Health to find out.

Deardorff and her team (which will include an MPH student and a post-doctoral fellow) will work with a group of more than 600 youth and their parents in Salinas, Calif. The research will include analyzing pubertal hormones, stress hormones, and cultural factors that may exacerbate or protect against the negative effects of stressful circumstances.

“My goal has always been to understand how stress gets under the skin and can lead potentially to earlier and faster puberty and to sexual risk-taking behaviors in Latino youth who are growing up in adverse circumstances.”

According to research, Latino youth are more likely to use drugs and alcohol at younger ages and more likely to engage in unprotected sex than other ethnic groups. Studies also show that puberty begins earlier in Latino adolescents than their non-Hispanic white counterparts. Current research points to obesity as a key factor, but Deardorff believes a high BMI provides only a partial explanation.

“We suspect that exposure to high levels of psychological and social adversity early in life is also a factor that influences pubertal timing,” she says. “And we know that those burdens of stress are disproportionately distributed among ethnic minorities in the United States.”

The youth participating in Deardorff’s studies are part of the Center for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study, a longitudinal birth cohort study, led by Professor of Epidemiology Brenda Eskenazi, which examines chemicals and other factors in the environment and children’s health. The CHAMACOS study, which began in 1999, follows the principles of community-based participatory research and provides the community with ways to reduce chemical exposures to children and families.

“They have been giving back to the community, so in return Eskenazi’s team has a very strong commitment from the families to this research 14 years later,” notes Deardorff.

Also working with this same cohort is Nina Holland, adjunct professor of environmental health sciences. Holland is looking at gene-chemical interactions and obesity in these youth. “It’s a nice marriage of studies that have different sets of aims but are highly complementary,” Deardorff says. She will start working with the migrant farming community in April 2014.

Leading the Future

2014 Center for Health Leadership Fellows

Darcey Craig and Lauren Villa

Why did you choose to become a CHL Fellow?



Craig: CHL is a good fit for my graduate school experience because it provides depth and hands on learning outside the classroom setting. It is an opportunity to be a bit vulnerable and work on skills. It is often hard to ask for help developing or admitting that you don't know how to be a better leader. For me, CHL is a great opportunity to learn and challenge each other in a very supportive environment with a shared value of growth and impact.

Villa: I can say, with 100% confidence, that becoming a Fellow was the best decision of my academic career. Wendy Hussey told me about the program during my first semester at the UC Berkeley School of Public Health and urged me to apply. I could have never anticipated that Fellows would teach, inspire, and empower me in such a profound way.



Tell us about your experience thus far.

Craig: I am so grateful to be a part of the **Fellows program**. It is helping to really round out my graduate school experience on so many levels. I am able to take what I learn in my classes and what I bring with me from past work and life experiences and really go deeper and create a foundation of skills I will use no matter what I do after graduate.

Villa: The friendships I made and the practical leadership skills I gained throughout the program allowed me to realize my own potential. In Fellows, we push each other to think creatively and challenge traditional approaches to health inequalities. Before the program I didn't envision myself as a public health leader. Now, I am prepared and excited to use the leadership skills I learned in Fellows to tackle difficult-to-achieve public health goals.

What is your favorite thing about the CHL Fellows Program?

Craig: Although we aren't that far into our 18 month internships, this feels like the best part so far. The fact that we get to work with an organization for 18 months and understand an issue and then develop plans and programs to implement some kind of intervention to alleviate or change the issue, to be able to see a project from beginning to end and having a consistent team of other Fellows as well as organizational staff that are invested in the project as well as our own growth and development is an incredible opportunity!

Villa: Fellows taught me the meaning of the phrase, "lead from where you are." I saw first-hand how the Center for Health Leadership staff, public health professionals, community members, and my peers embodied this phrase. I watched and listened to their stories of leadership, which in turn helped me realize my own path to public health and leadership. Now, I understand and treasure the impact one powerful leader can have in a community. Public health feels like a new frontier budding with opportunity, one that I am excitedly prepared to conquer because of Fellows.

Incoming 2014 MCH Students

Stephanie Arteaga

Stephanie is very excited to join UC Berkeley's Masters of Public Health program in Maternal and Child Health. She has always been interested in the barriers Latinas face when it comes to reproductive and sexual health. It is her goal to provide solutions to these problems, helping other Latinas make informed decisions about their bodies. She chose UC Berkeley because she knows she will gain the skills needed to reach this goal. She is excited to learn from such an amazing faculty as well as her fellow students.



Billy Luong

Billy is a newly admitted MCH student. He graduated from San Jose State University with a major in Psychology and minor in Health Science. Billy currently works at the California Department of Public Health where he conducts Hepatitis B surveillance among pregnant women and their infants in

California. He chose Berkeley's MCH program because it was the perfect combination of applied, quantitative research with a community based feel to it. He is the most excited about meeting like-minded people and eating Cheeseboard pizza late at night and for leftovers.



Nerissa Nance

A Bay Area native with an insatiable thirst for travel, Nerissa has always been passionate about working with programs that aid and empower women. Since graduating from Berkeley's own School

of Social Welfare in 2010, she has collaborated on program evaluation projects for nonprofits in Brazil, Colombia, and (currently) in Peru. Though she first thought she wanted to stray from the beautiful Bay, she chose UC Berkeley's MCH program because of its rigorous quantitative focus and research opportunities. She is the most excited about working with and learning from Berkeley faculty who are at the front-line of international population health program research.

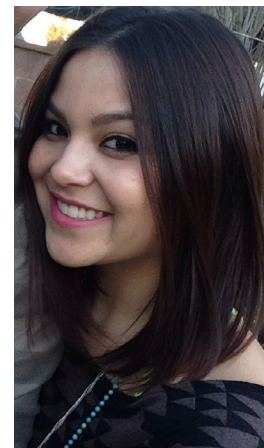
Sarah Raby

Sarah Raby graduated from the University of Michigan in 2012 with a degree in International Health. After graduation, she moved to the Bay Area and joined AmeriCorps, serving as a volunteer coordinator at a medical facility for children with life-limiting illnesses. Sarah has always had a passion for public health, and is thrilled to be further pursuing her studies at Berkeley. She is interested in studying women's birth experiences and outcomes, and increasing access to care. Sarah appreciates MCH's commitment to excellence in training and research, and the ability of the program to respond to the unique and emerging needs of the Bay Area.



Stacey Yamamoto

Stacey is a fun-loving girl from Southern California. "Not going to lie, I cried tears of joy when I found out I was accepted to the program!" Stacey knows UC Berkeley is the perfect fit for her, and is thrilled about the opportunities that lie ahead. She is most looking forward to meeting her classmates and she knows that the next two years will be a period of personal growth and excitement.



Alumni Updates

Susan Purdin**MPH, 1991**

Susan Purdin has worked for the International Rescue Committee for 15 years as an advisor on reproductive health and as a country director. From 2000 to 2008, Susan held an adjunct faculty position in Columbia University's Program on Forced Migration and Health. Susan currently resides in Nairobi, Kenya.

Maura Graff**MPH, 2008**

Maura works on family planning policy advocacy for Population Reference Bureau in Washington, DC, and she is the proud momma of a baby boy born in June 2012.

Teresa Chin**MPH, 2009**

Teresa is a radio and print journalist. She writes magazine stories on science and health topics and work as a producer and director of media education at Youth Radio in Oakland.

Anisha Gandhi**MPH, 2009**

Anisha Gandhi is completing her doctoral degree in Epidemiology at UNC Chapel Hill. Her research focuses on how social and structural forces shape sexual and reproductive health.

Lauren Goli**MPH, 2010**

Lauren is graduating from Tufts School of Medicine and will start her Family Medicine Residency at Swedish Hospital in Seattle, where she will be working in an underserved Latino clinic.

Heidi T. Tuason**MPH, 2010**

Heidi started her 1st year at UCLA's DrPH program in Community Health. Before heading down to LA, she facilitated digital storytelling workshops with the Filipino, Samoan, & Southeast Asian communities in SF around mental health stigma. Aside from school, she continues to play the piano for churches, retreats, & musicals.

Miranda Walker Brillante**MPH, 2012**

Since April 2013, Miranda has been working at the Center on Social Disparities in Health at UCSF on two projects related to the California Black Infant Health program.

Christina Jeffery Cackler**MPH/MSW, 2013**

After graduating, Christina spent 3 months in South America. Currently, she works part-time for a medical software non-profit, and she is also working on a paper drawing on my thesis research.

Ryan Gamba**MPH, 2013**

Ryan is a student at UC Berkeley's School of Public Health in the Epidemiology PhD program. He is enjoying the opportunity to study the topic of food insecurity during pregnancy with Dr. Barbara Laraia.