

PhD Program News

FALL 2016

FROM THE DIRECTOR

Please join me in welcoming our incoming cohort of PhD students. Since the inauguration of the PhD program, we have benefited tremendously from the excellence and generosity of our early cohorts of students. Our students go above and beyond in helping each other and building the program, while pursuing excellence in their own research and training activities.

Each year I worry that it will be difficult for incoming students to maintain the level of excellence and sense of camaraderie established by their predecessors, but as best I can tell, this year's cohort will be equally impressive. Please take a moment to read a little about the backgrounds and diverse research interests of our four newcomers, and then reach out to say hello or grab a cup of coffee with them someday. In addition to four students who are new to UCSF, we are also delighted that Vignesh Arasu is now officially a PhD student. Vignesh was previously in the MAS program, and is a clinical fellow in the UCSF radiology department. Many of us have already had the opportunity to work with him and know why we are so enthusiastic about Vignesh's current and future work in epidemiology.

In other news, last week we kicked off our seminar series this year, with a visit from Dr. Mark Hayward of UT Austin.

Cont'd on p 2



Department of
Epidemiology &
Biostatistics



Welcome New PhD Students for 2016-17



Amanda Irish, DVM, MPH

*Education: UC, Davis (BS,
Genetics) ; UC, Davis (DVM);
UC, Berkeley (MPH)*

I originally was a practicing small animal veterinarian for four years. I eventually wanted to pursue a field where I would have a greater impact and to look at more interesting problems. My main research interests fall within the One Health initiative – focusing on the intersection of human, animal, and environmental health – especially as applied to zoonotic and vector-borne diseases. During my MPH I gained an interest in health disparities and in GIS, and hope to incorporate these into future research.

Cont'd on p 2

Kristina Van Dang, MPH



Education: University of California, Berkeley (BA, Economics; BA, Molecular and Cell Biology); Emory University (MPH, Epidemiology)

Research Focus: My research outlined how to combine data and evidence in methods for meta-analysis of observational studies in epidemiology (MOOSE). I applied these guidelines to how iron indicators can be used to estimate risk of colorectal cancer, and understand how public health systems improve health outcomes during disasters. Additionally, I studied how health incentives can be offered to increase follow-up HIV testing in Zambia. I'm interested in how health can be improved through innovative data structures.

Dr. Hayward, a renowned demographer and author of landmark work on lifecourse determinants of health, joined us to discuss the disturbing recent news on trends in life expectancy among US middle-aged adults. This topic received extensive news coverage and sparked much debate about methodological approaches (for those who missed it, it was economists versus statisticians about appropriate age adjustment techniques) and interpretation.

The debate about deteriorating life expectancy in middle aged US whites seems especially timely after the election outcomes. Below is figure that garnered widespread attention. Opioid addiction has been emphasized as a likely explanation for

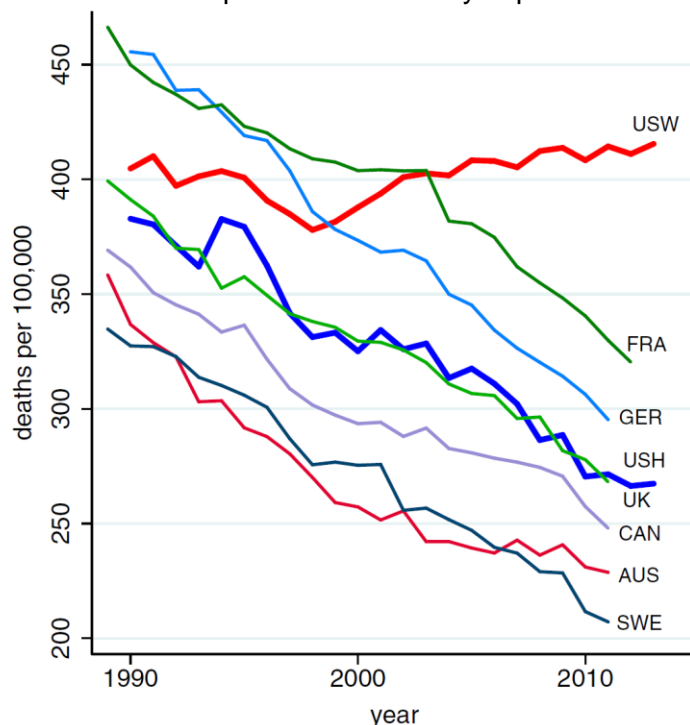


Fig. 1. All-cause mortality, ages 45–54 for US White non-Hispanics (USW), US Hispanics (USH), and six comparison countries: France (FRA), Germany (GER), the United Kingdom (UK), Canada (CAN), Australia (AUS), and Sweden (SWE).
From Case & Deaton, PNAS 2015

these trends, and suicide and substance use have certainly contributed to mortality patterns. Dr. Hayward argued opioids were unlikely to explain the majority of recent patterns however, and noted that “the pace of technological change throughout American society may be outstripping advances educational achievement.” In Durkheim’s classic book, *Suicide* (1895), he reframed suicide as a social phenomenon, providing an essentially public health account of why rates of suicide are relatively stable within social groups year after year, but vary substantially between groups. Perhaps Durkheim would have some insights for modern epidemiology.

In other notes, I want to thank the Departmental Diversity committee for several activities enriching the community this fall, including the wonderful department picnic. The Society for Epidemiologic Research (SER) is also launching a diversity effort and I encourage folks to be involved:
<https://epiresearch.org/2016/11/04/diversity-in-ser/>

While you are checking out the SER site, you may be interested in Dr. Robert Platt’s recent SER Experts talk on immortal time bias - an important bias that pops up in unexpected places:
<https://epiresearch.org/about-us/archives/video-archives-2/immortal-time-bias/>!

Finally, this is the season when PhD program applicants may reach out to department members to learn more. Please offer as much help as you have time for and feel free to forward inquiries to me and Victoria (or just give the program email: ETS-PhD@psg.ucsf.edu).

Hope to see you all at upcoming PhD program events, including several final PhD presentations this fall (see page 7 for the schedule).

Maria Glymour, SD
Associate Professor and Director,
Epidemiology and Translational Science PhD
Program



Chloe Eng, MSPH

Education: Northeastern University (BS, Health Science); Emory University (MSPH, Epidemiology)

My research interests include social epidemiology methods and the relationship between life course socioeconomic exposures and aging. My interest in social epidemiology began while assisting a health educator counseling disadvantaged Hispanic immigrants with newly diagnosed diabetes in the San Francisco Bay Area. I continued to explore health disparities in a variety of contexts, including neighborhood access to childhood education and community physical activity in Boston, nutrition patterns in various regions of the US, and social determinants of blood pressure in South African young adults. As a doctoral student, I'm interested in further exploring mechanisms behind such social factors as risk factors for chronic disease, and to reduce biases in the measurement of social determinants of health in diverse aging populations.



Francois Rerolle, MS

Education: Ecole Polytechnique, France (MS, Engineering); Stanford University (MS, Environmental Engineering)

I am interested in the epidemiology of infectious diseases and their socio-economic impacts in less-developed countries. I have conducted research on the epidemiology of Lymphatic Filariasis in Cameroon and as an environmental engineer, participated in numerous WASH studies. At UCSF, I hope to join the Malaria Elimination Initiative (MEI) and specialize in spatial epidemiology. In my spare time, I like to discover California and the San Francisco area, hiking, climbing, surfing or simply hanging out with friends.



Vignesh Arasu, MD

Education: Harvey Mudd College (BS Neuroscience), UCSF (MD, Residency/Fellowship Radiology)

I am a clinical radiologist specializing in cancer imaging, and my research interests are broadly in breast cancer imaging and imaging utilization. Most of my research focuses on developing precision imaging models in breast cancer. I work on two multicenter trials in this regard, the WISDOM study (personalized breast screening) and ISPY-2 study (personalized breast cancer treatment), where UCSF serves as the lead site. These trials integrate mammography or breast MRI as "biomarkers" of risk or treatment response to guide clinical decisions. Through the doctoral program, I hope to gain a deep understanding of research methodology to be able to push my work to be as innovative and impactful as possible. I am also interested in understanding techniques such as "big data" mining, genetic epidemiology, and NLP/machine learning.

Dr. Rachel Whitmer launches a new study on brain health and dementia in a multiethnic population



Photo: Paul Chinn, The Chronicle

Dr. Rachel Whitmer and Dr. Elizabeth Rose Mayeda discuss their recent work on racial/ethnic inequalities in dementia incidence.

Congratulations to Dr. Rachel Whitmer, PhD, Associate Professor in the Department of Epidemiology and Biostatistics and faculty mentor on our T32 Aging and Chronic Disease training program, who recently received a major grant to launch a landmark study on brain health and dementia in racially diverse older adults. This new cohort will enroll participants from a remarkable earlier study centered at the Kaiser Permanente Northern California Health system from the 1960s through the 1980s, in which participants completed multiphasic exams with physical and social assessments. By enrolling people who participated in the earlier study, the new cohort has an effective follow-up of over 40 years.

Dr. Whitmer has previously used the multiphasic data, paired with comprehensive data from Kaiser Permanente's electronic health record, to identify midlife dementia risk factors such as smoking, hypertension, depression, cholesterol, and obesity.

The new cohort will allow much richer understanding of neuropsychological and neuroimaging assessments of brain aging. Dr. Whitmer said "We will be able to analyze how factors such as midlife vascular health, psychosocial conditions, and early-life growth indicators have influenced brain health and dementia among the current members of Kaiser Permanente." Taking advantage of the unusual racial

and ethnic diversity of the Northern California area, the new study, dubbed the KHANDLE cohort (Kaiser Healthy Aging and Diverse Life Experience) will be enrolling 1,800 white, black, Asian and Latino Kaiser Permanente members and conduct comprehensive medical and cognitive evaluations of the participants.

Dr. Whitmer is working with colleagues at UC Davis, including Dr. Dan Mungas and Dr. Charlie DeCarli, who will provide detailed longitudinal neuropsychological assessments as well as magnetic resonance imaging and positron emission tomography scans on a subset of participants.

Recent work by Dr. Whitmer and PhD program alumnus Dr. Elizabeth Rose Mayeda demonstrated large differences in dementia incidence rates across racial/ethnic groups, highlighting the evidence gaps in dementia research that does not include racial/ethnic diversity. Dr. Mayeda and Dr. Maria Glymour will also collaborate in launching the new cohort. This KHANDLE cohort will fill a much needed gap in understanding dementia and brain aging across racial and ethnic groups, bringing a life course perspective to research with a group of diverse elderly.

Accomplishments: Publications

Aiemjoy, Kristen

KA Aiemjoy, NE Stoller, S Gebresillasie, A Shiferaw, Z Tadesse, T Sewent, B Ayele, M Chanyalew, S Aragie, K Callahan, A Stewart, PM Emerson, TM Lietman, JD Keenan, CE Oldenburg. Is using a latrine a "strange thing to do"? A mixed methods study of sanitation preference and behaviors in rural Ethiopia. *Am J Trop Med Hyg*. In press.

Chen, Yea-Hung

Snowden JM, **Chen YH**, McFarland W, Raymond HF. Prevalence and characteristics of users of pre-exposure prophylaxis (PrEP) among men who have sex with men, San Francisco, 2014 in a cross-sectional survey: implications for disparities. *BMJ*. June 2016.

Demb, Joshua

Din N, Allen IE, Satariano WA, **Demb J**, Braithwaite D. Alcohol consumption and mortality after breast cancer diagnosis: The health and functioning in women study. *Breast Dis*. 2016 Jul 28;36(2-3):77-89.. PubMed PMID: 27662274.

Demb J, Allen IE, Braithwaite D. Utilization of screening mammography in older women according to comorbidity and age: protocol for a systematic review. *Systematic Reviews*..

Hoeft, Kristin

Barker JC, Guerra C, Gonzalez MG, **Hoeft KS**. Acceptability of Salt Fluoridation in a Rural Latino Community in the United States: An Ethnographic Study. *PLOS ONE*. 2015; July

Hoeft KS, Barker JC, Shiboski S, Pantoja-Guzman E, Hiatt RA. Effectiveness evaluation of *Contra Caries* Oral Health Education Program for improving Spanish-speaking parents' preventive oral health knowledge and behaviors for their young children. *Community Dent Oral Epidemiol* 2016.

Kalapatapu, Rajkumar

Kalapatapu RK, Giles GM. The relational neurobehavioral approach: can a non-aversive program manage adults with brain injury-related aggression without seclusion/restraint? *Disability and Rehabilitation*. 2016 Sep 16:1-8. [Epub ahead of print]

Kalapatapu RK, Delucchi KL, Wang S, Harbison JD, Nelson EE, Kramer JH. Substance use history in behavioral-variant frontotemporal dementia versus primary progressive aphasia. *The Journal of Addictive Diseases*. 2016;35(1):36-41. PubMed ID: 26485480; PubMed Central ID: PMC4720534

Herbst ED, McCaslin SE, **Kalapatapu RK**. Use of Stimulants and Performance Enhancers During and After Trauma Exposure in a Combat Veteran: A Risk Factor for Posttraumatic Stress Symptoms. *The American Journal of Psychiatry*. Accepted 5/3/2016. (In Press)

Kalapatapu RK, Ventura MI, Barnes DE. "Lifetime Alcohol Use & Cognitive Performance in Older Adults". *Journal of Addictive Diseases*. Accepted 10/3/2016.

Mehrotra, Megha

Mehrotra, Megha L., et al. "The Effect of Depressive Symptoms on Adherence to Daily Oral PrEP in Men who have Sex with Men and Transgender Women: A Marginal Structural Model Analysis of The iPrEx OLE Study." *AIDS and Behavior* (2016): 1-8.

Miller, Cecily

Blount, Robert J., Minh-Chi Tran, Charles K. Everett, Adithya Cattamanchi, John Z. Metcalfe, Denise Connor, **Cecily R. Miller**, Jennifer Grinsdale, Julie Higashi, and Payam Nahid. "Tuberculosis progression rates in US Immigrants following screening with interferon-gamma release assays." *BMC Public Health* 16, no. 1 (2016): 875.

Moseson, Heidi

Hossain A, **Moseson H**, Raifman R, Gerdtz C, Biswas K, Foster DG. 'How shall we survive': a qualitative study of women's experiences following denial of menstrual regulation (MR) services in Bangladesh. *Reproductive Health*. (2016) 13:86.

Kirsch T, **Moseson H**, Massaquoi M, Nywenswah T, Goodermote R, Peters D. Impact of Interventions and the Incidence of Ebola Virus Disease in Liberia- Implications for Future Epidemics. *Health Policy & Planning*. IN PRESS.

Prasad, Priya A

Gleason, Nathaniel, **Priya A. Prasad**, Sara Ackerman, Chanda Ho, Jennifer Monacelli, Michael Wang, Don Collado, and Ralph Gonzales. "Adoption and impact of an eConsult system in a fee-for-service setting." In *Healthcare. Elsevier*, 2016.

Rodriguez, Luis

Rodríguez LA, Mundo-Rosas V, Méndez-Gómez-Humarán I, Pérez-Escamilla R, & Shamah-Levy T. Dietary quality and household food insecurity among Mexican children and adolescents. *Maternal & Child Nutrition*. Accepted August 2016.

Roh, Michelle

Muhindo MK, Kakuru A, Natureeba P, Awori P, Olwoch P, Ategeka J, Nayebare P, Clark TD, Muehlenbachs A, **Roh M**, Mpeka B. Reductions in malaria in pregnancy and adverse birth outcomes following indoor residual spraying of insecticide in Uganda. *Malaria Journal*. 2016 Aug 26.

Roh ME, Oyet C, Orikiriza P, Wade M, Kiwanuka GN, Mwanga-Amumpaire J, Parikh S, Boum Y. Asymptomatic Plasmodium infections in children in low malaria transmission setting, southwestern Uganda. *Emerging Infectious Diseases*. 2016 Aug;22.

Roh ME, Oyet C, Orikiriza P, Wade M, Mwanga-Amumpaire J, Boum Y, Kiwanuka GN, Parikh S. Screening for Glucose-6-Phosphate Dehydrogenase Deficiency Using Three Detection Methods: A Cross-Sectional Survey in Southwestern Uganda. *The American Journal of Tropical Medicine and Hygiene*. 2016 Sep 26.

To, Tu My

Ward JB, Haan MN, Garcia ME, Lee A, **To TM**, Aiello AE. Intergenerational education mobility and depressive symptoms in a population of Mexican origin. *Annals of Epidemiology*. 2016 May 31.

Accomplishments: Conferences

Demb, Joshua

Presented at the American Thoracic Society (ATS) Conference in May 2016: Khatami S, **Demb J**, Wang S, Takemoto S, Braithwaite D, Trivedi N. The Impact of Mental Health Comorbidities on Timeliness of Care in Veterans with Lung Cancer.

Gave an oral presentation at Epidemiology Congress of the Americas in June 2016: **Demb J**, Braithwaite D. Chronic Inflammation and Risk of Lung Cancer. Epidemiology Congress of Americas.

Hoeft, Kristin

Cordeiro A, **Hoeft KS**, Guerra C, Chung L, Barker JC, Burke NJ. "Assessing Neighborhood Environments and Oral Health Resources in Oakland, CA". National Oral Health Conference, Oral presentation. April 20, 2016. Cincinnati, OH.

Hiatt RA, Stewart SL, **Hoeft KS**, Kushi L, Windham G, Biro F, Pinney S, Wolff M, Teitelbaum S, Braithwaite D. Childhood socioeconomic position and pubertal onset: implications for breast cancer. Amer Society of Prev Oncology Meeting

Hiatt RA, Stewart SL, **Hoeft KS**, Kushi L, Windham G, Biro F, Pinney S, Wolff M, Teitelbaum S, Braithwaite D. Childhood socioeconomic position and pubertal onset: implications for breast cancer. Epidemiology Congress of the Americas. June 2016.

Chang C, Barker JC, **Hoeft KS**, Guerra C, Chung LH, Burke NJ. Importance of content and format in oral health instruction for low-income Mexican immigrant parents: A qualitative study. Health Disparities Symposium. October 21, 2016, San Francisco, CA.

Hoeft KS, Shiboski S, Hiatt RA, Barker JC. Social Cognitive Theory and Spanish-speaking Parents' preventive oral hygiene behaviors for their young children. Oral Presentation. American Public Health Association Annual Meeting. October 31, 2016, Denver, CO.

Hoeft KS, Guerra C, Chung LH, Barker JC, Burke NJ. Parents, candy, and bottles: Dental provider perspectives on children's oral health disparities in urban California. Poster presentation. American Public Health Association Annual Meeting. October 31, 2016, Denver, CO.

Mehrotra, Megha:

UK Causal Inference Meeting in April 2016 titled "Transportability of the effect of HIV pre-exposure prophylaxis between subgroups of the iPrEx study."

Moseson, Heidi

Attending the Africa Regional Conference on Abortion in Addis Ababa, Ethiopia. November 2016

Prada, Priya

Society for General Internal Medicine, Hollywood, FL, May 2016. "How should primary care populations be defined? The implications of casting a wider net..."

Rodriguez, Luis

Invited Professor at the "Programa de Actualización en Salud Pública y Epidemiología" at the National Institute of Public Health, Mexico. Co-taught course titled *Global Health Case Studies* with Dr. Jaime Sepulveda.

To, Tu My

Epidemiology Congress of the Americas. Miami, Florida. June 2016. "The effect of nativity on longitudinal change of low-density lipoproteins in a cohort of older Mexican Americans."

Tai, Caroline

California Association of Regional Cancer Registries Conference, Dec 2015; "Using Surveillance Data to Drive a Cancer Center Research Agenda: Identifying the Cancer Burden for the San Francisco Cancer (SF-CAN) Initiative."

American Society of Human Genetics Annual Meeting, Oct 2015; "Genome-wide Analysis for Prostate Cancer Biochemical Recurrence Identifies Novel Loci for Disease Progression at 9p23.

Epidemiology Congress of the Americas, Jun 2016; "Racial differences identified in a genome-wide analysis for prostate cancer biochemical recurrence."

Accomplishments: Awards

Abdiwahab, Ekland

- UC Smoke and Tobacco-Free Student Fellowship 2016-2017
- T-32 Predoctoral Training Grant 2016-2017

Ackley, Sarah

- NIH F31 "Ruth L Kirschstein Predoctoral Individual National Research Service Award."
- Application of Branching Processes to Measles in California. Scored 13th percentile

Demb, Joshua

- Granted the Earle C. Anthony Fellowship for (2016-2017)

Aiemjoy, Kristen

- NIH-NICHD F-31 NRSA application on "Quantitative bias analysis to adjust for misclassified pediatric diarrhea in a cluster-randomized trial". Scored 3rd percentile (impact score 17)

Wannier, S. Rae

- Granted the Earle C. Anthony Fellowship for (2016-2017)

Mehrotra, Megha

- NIH F31 "Ruth L Kirschstein Predoctoral Individual National Research Service Award. Scored 7th percentile (impact score 13)

Mooney, Alyssa

- Bureau of Justice

Moseson, Heidi

- F31 NRSA Pre-Doctoral Fellowship Award through NICHD. Scored 11th percentile (impact score 20)
- Vittinghoff Innovation Award for Methodological Innovation & Excellence, 2016
- Soroptimist Award for Women in Science, 2015-2016

Rodriguez, Luis

- UC MEXUS Small Grant Award for my work at the National Institute of Public Health, Mexico, summer 2016

UPCOMING EVENTS

Wednesday, November 16, 2016

9 – 12PM, Mission Hall Room 2500
SER Digital by Dr. Charles Poole and
Dr. Donna Spiegelman - "Perspective
of relative versus absolute effect
measures"

Friday, November 18, 2016

9 – 11AM, Mission Hall Room 2500
Priya Prasad dissertation: Evaluating
quality improvement (QI) interventions:
strengthening causal inference with
observational data

Thursday, December 1, 2016

2:30–5:30PM, Mission Hall Room 1406
Guest lecture by Samuel Jenness,
PhD, Assistant Professor, Emory
University - DEB workshop on network
analysis/ID modeling

Friday, December 2, 2016

12 – 1pm, Mission Hall Room 1407
Kristin Hoeft dissertation: Parental
preventive behaviors and oral health in
Latino children

Friday, December 16, 2016

12:00–1:00PM, Mission Hall Room
1401
Yea-hung Chen dissertation: "HIV
transmission among men who have sex
with men: risks, tools, and
consequences"

Monthly last Wednesday of the month

12 – 1:15PM, Mission Hall 2500
Social Justice Epidemiology Journal
Club

November 30, 2016: Effect of implicit
bias on quality of care

December 21, 2016: Affordable Care
Act

January 25, 2017: Healthcare systems
and access patterns for immigrants and
refugee populations

Thursday, February 23, 2017

Katherine Keyes, Columbia University

Wednesday, March 15, 2017

Jarvis Chen, Harvard University

What
are these
PhD
students
up to?



Luis Rodriguez , MPH, RD, with Dr. Martha Kaufer at
the National Institute of Health Sciences and Nutrition in
Mexico City.



Stephen Asiimwe, Chloe
Eng, Rae Wannier,
Michelle Roh, Elizabeth
Rose Mayeda and Luis
Rodriguez at the Annual
Graduate Division
Celebration

Additional pictures at the
celebration, **Chloe Eng,**
Luis Rodriguez, Elizabeth
Rose Mayeda and Rae
Wannier.





Kristin Hoeft with Annika (age 3.5) and new addition, Maya (age 7 months).

Daniel Westreich, PhD, Associate Professor of epidemiology at the University of North Carolina – Chapel Hill giving a lecture on “Causal impact: from patients to policies.”



Luis Rodriguez, MPH, RD with Dr. Jaime Sepulveda and students, was a visiting professor at the “Programa de Actualización en Salud Pública y Epidemiología” at the National Institute of Public Health, Mexico.