

PhD Program News

FALL/WINTER 2018

FROM THE DIRECTOR

What a busy term it's been! We welcomed a terrific new student cohort. One of the pleasures of my role in the PhD program is the opportunity to learn about the breadth of expertise our students bring. Dr. Jackie Torres and I co-instruct the PhD student seminar, so we have a birds-eye view of first-year student projects. These span quite a gamut, including social, behavioral, genetic, and clinical determinants of multiple health domains (kidney disease, stroke, cancer, reproductive health...). Check out the brief bios of our first-year students in this newsletter and come by the PhD student domain in Mission Hall to meet them in person.

This fall, Drs. Mooney and Ackley delivered their final dissertation presentations. Congrats to the new PhDs and all the faculty, staff, family and friends who helped them along the way (it takes a network). Josh Demb presents his dissertation Jan 4 and then starts a post-doctoral fellowship at UCSD. Josh is on a roll: he recently received an outstanding score on his NIH F32 post-doctoral fellowship grant.

It's very gratifying to see our alums' work recognized, so I was proud that the American Journal of Public Health selected Alyssa Mooney's dissertation paper "Racial/Ethnic Disparities in Arrests for Drug Possession After California Proposition 47, 2011–2016" among its 2018 papers of the year.

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Shown here are some members of the lifestyle oncology research group (left to right): Rebecca Graff, ScD, Stacey Kenfield, ScD, June Chan, ScD, Erin Van Blarigan, ScD, and Crystal Langlais, MPH.

Student Spotlight: Crystal Langlais

Crystal Langlais, a 2nd year PhD student, has been working with June M. Chan, ScD, a Cancer Epidemiologist and Professor in the Department of Epidemiology and Biostatistics and the Urology Department. Dr. Chan leads a lifestyle oncology research group with collaborators Stacey Kenfield, ScD, and Erin Van Blarigan, ScD. Through her work with Dr. Chan's group, Crystal is about to submit a paper titled *Obesity and Prostate Cancer Recurrence Following Radical Prostatectomy*. The authors observed an association between increased obesity and disease severity at diagnosis, consistent with a 2-fold increase in risk for obese men versus men with normal body mass index. This can have important implications for clinicians, as it suggests that current screening practices may not have the same ability to detect small tumors in larger patients, potentially leading to a delay in diagnosis.

Continued mentorship from Dr. Chan and her team has led to ongoing projects looking at post-diagnostic coffee and tea consumption and prostate cancer progression, aimed to address a current limitation in the literature. A joint effort with a visiting medical student from Columbia University, Kyle Zuniga, looking at complementary and alternative medicine use, such as selenium and vitamin E, and prostate cancer progression is also underway. Additionally, Crystal has been working to advance her training in genetic

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epidemiology, which she hopes to incorporate into her dissertation work. Part of this training is through the joint mentorship effort between Drs. Chan and John Witte, stemming from a research rotation with the Witte Lab. This project uses genetic variants associated with obesity in a Mendelian Randomization analysis to better understand the association between obesity and prostate cancer severity.

Finally, Crystal has also recently become involved with the UC-Wide Pancreatic Cancer Tumor Consortium following a research rotation she completed with Paige Bracci, PhD, in Spring of her first year. Dr. Bracci

plays an instrumental role in the Consortium's Early Detection Working Group (EDWG), led by Kim Kirkwood, MD, from the UCSF Department of Surgery. Her rotation work with Dr. Bracci implemented a pooled analysis from 8 international sites participating in the Pancreatic Cancer Case-Control Consortium (PanC4) to look at the association between pre-diagnostic and early adult obesity and pancreatic cancer. Under the mentorship of Dr. Bracci and in collaboration with the EDWG, Crystal is hoping to use imaging data to get physical measures of abdominal adiposity prior to diagnosis to better understand this relationship.

From the Director, cont'd from p 1

I was also thrilled to announce that alumnus Kathryn Ray's work was selected for the 3rd annual Vittinghoff Award, for her paper "Pooling Specimens to Estimate Microbiome Gamma Diversity for a Cluster Randomized Control Trial". The Vittinghoff award was launched in honor of our wonderfully inspiring and generous biostatistics Professor Eric Vittinghoff to recognize methodologically innovative work in epidemiologic, clinical, or translational research by current or recent trainees in the Department of Epidemiology and Biostatistics. My thanks to those who submitted excellent papers this year, thus making the selection process difficult, and to the generous anonymous external reviews who so kindly made the difficult determination.

In other news, we also have several new faculty joining the department. We may need a separate newsletter for the new faculty, but I will just mention a couple of folks. With the retirement of Dr. Mary Haan, Epi of Aging will now be taught by Assistant Professor Rebecca Graff. Dr. Graff completed her doctorate in cancer epidemiology at the Harvard School of Public Health before coming to UCSF for a post-doctoral fellowship in genetic cancer epidemiology. We are delighted to welcome her to the teaching faculty.

Other new faculty include Dr. Patience Afulani, who leads research on quality of maternity care, and Dr. Brittany Chambers, whose research is on structural discrimination and sexual and reproductive health inequities. With these additions to our already strong faculty group focused on women's health, reproductive health, and perinatal health, we felt it was time to add a new Area of Concentration to the PhD program. When the updated departmental

website is unveiled (coming soon), it will include this new Area of Concentration.

I've begun to suspect that the biostatisticians have a corner on departmental social activities (and of course the best Halloween costumes) so I want to mention that Dr. Anusha Vable recently launched a monthly happy hour for Bay Area social and population science researchers. Sign up here to receive announcements: <https://bit.ly/2GIXpyX>. Biostatisticians are also welcome, of course, especially if in costume.

Finally, the application deadline for the fall 2019 incoming class has just passed. Committee members are busy with initial evaluations of our applications. Early in January, we will request help from many individuals across the department and university in interviewing applicants. This process is extremely important but also a lot of work. We have managed to recruit such excellent students to date only because of the commitment and engagement of so many folks, so thanks in advance for your continued efforts.

That's all the news that fits in the newsletter box! Happy holidays everyone.

Maria Gymour, S.D.

Professor and Director, Doctoral Program in Epidemiology and Translational Sciences

Welcome Incoming PhD Students



Sandeep Brar, MD

Education: University of Calgary (BSc, Biochemistry and Cellular, Molecular & Microbial Biology); University of Calgary (MD); University of Alberta (internal medicine residency); University of Toronto (nephrology residency, kidney and kidney-pancreas transplantation fellowship)

I am a clinical nephrologist with a specialization in kidney transplantation. Currently, I am working as an adjunct instructor in the division of nephrology and I see patients at the UCSF Medical Center. My broad research interests include observational studies and clinical trials involving patients with renal dysfunction or a renal transplant. I am currently involved in two clinical trials at UCSF which focus on patients with hospital acquired acute kidney injury. As a doctoral student, I hope to develop skills in research methodology and clinical trial design in order to improve outcomes for patients with renal disease.



Jean Digitale, MPH, RN

Education: University of Pennsylvania (BS, Nursing); Columbia University (MPH)

My research interests include epidemiologic methods, pediatric hospital medicine, and pediatric infectious disease. My primary research experience thus far has been in evaluation of social programs for adolescent girls in Zambia. Additionally, I have worked as a pediatric RN since 2008, primarily in intensive care, and aim to incorporate my nursing expertise into my research. During this program, I hope to strengthen my understanding of causal inference methods and apply those to clinical questions in pediatrics. After completing my doctorate, my goal is to teach epi methods, one of my passions.



Sepehr Hashemi, DMD

Education: University of California, Davis (BS, Genetics with emphasis on genomics); Harvard University (DMD)

I am a dentist and a prospective oral and maxillofacial surgeon, with special interest in predicting common surgical outcomes and complications. My previous research has focused on maxillofacial transplantation platforms, palliative therapy of oral cancer complications, and molecular assessment of treatment-specific complications in breast and prostate cancers.

PhD Students Feature



Michelle DeVost, MPH

Education: California State University, Northridge (BS, Mathematics, Pure Mathematics and Classical Applied Mathematics concentration); UCLA (MPH, Biostatistics)

Research Focus: My professional research experience ranges from statistical consulting for model development and biomarker validation in nursing to investigating sexual health behaviors and biomedical HIV prevention among sexual and gender minority communities. As a doctoral student, I am particularly interested in the principles of study design, statistical methods for clinical trials, applying mathematical modeling to public health research, and leveraging electronic medical records data to investigate barriers to effective intervention implementation and to dynamically monitor and enhance population health.



Alice Guan, MPH

Education: University of California, Santa Cruz (BS, Molecular, Cell and Developmental Biology; BA, Philosophy - Religious Thought); San Francisco State University (MPH, Community Health Education)

My research interest lies in the intersection of immigration/migration and health. More broadly, I'm interested in racial health disparities, social epidemiology, and the research to policy pipeline. My primarily research experience has been focused on smoking cessation interventions for Asian American male smokers. My doctoral training will focus on the use of spatial methods to better understand health disparities in urban immigrant populations. Ultimately, my goal is to contribute to the establishment of targeted interventions and research-driven policy.



Erika Meza, MPH

Education: Loyola Marymount (BS Applied Mathematics), Columbia University (MPH, Environmental Health)

My research interests lie in social epidemiology and understanding how interactions between environmental, social and psychosocial factors promote or suppress the onset of disease. My interest in social epidemiology began while collaborating on an air pollution study in New York City and learning about the impact of neighborhood characteristics on health disparities.

As a doctoral student, I am interested in epidemiologic research design and statistical methods that can be used to identify significant factors and interactions affecting minority health and inform the development of effective community-based interventions.

PhD Students Feature



Sarah Raifman, MPH

Education: Brown University (AB, Development Studies); Harvard University (MS, Global Health and Population)

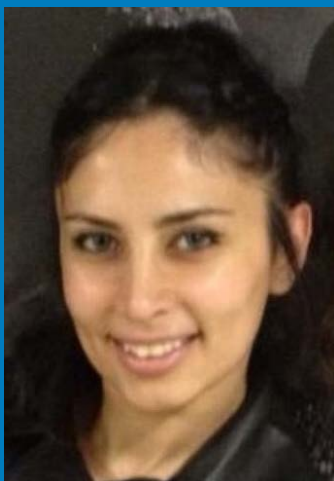
My background and research interests are in sexual and reproductive health, health policy, and social epidemiology. I work at a UCSF research program called Advancing New Standards in Reproductive Health (ANSIRH), where I focus on evaluating the consequences of abortion restrictions on health and wellbeing, measuring the morbidity and mortality due to unintended pregnancy and unsafe abortion, and exploring new models for family planning and abortion service provision. I am interested in conducting innovative policy-relevant research to expand access to quality reproductive health services.



Marta San Luciano Palenzuela, MD

Education: University of Navarre, Spain (MD), Boston University (Residency Neurology), Beth Israel Medical Center (Fellowship Movement Disorders), Albert Einstein College of Medicine (MS Clinical Research Methods)

I am a clinical neurologist with specialty training in movement disorders, and my research interests are broadly in clinical and genetic epidemiology of Parkinson's disease, dystonia and other movement disorders and neurodegenerative illnesses, as well as in outcomes research in neurology and neuromodulation surgeries. My current research focuses on identifying predictors of favorable motor outcomes following deep brain stimulation surgery in isolated dystonia, a disabling movement disorder. While this type of surgery can improve symptoms in many patients, there is great variability in results and a great proportion of non-responders exist. Genetic etiologies of dystonia and different phenotypes may underline some of the differences. By means of the doctoral program, I hope to improve my understanding of research methodology to be able to identify such predictors in an innovative way and improve clinical care for this population.



Zara Izadi, MAS

Education: Robert Gordon University, School of Pharmacy (MPharm, Hons); University of California, San Francisco (MAS, Training in Clinical Research)

My academic interests include patient-reported outcomes, psychometric evaluations, quality improvement and cost-effectiveness. My research has focused on measurement properties of patient-reported outcomes in rheumatology and differences among racial/ethnic groups. Prior to my MAS, I worked as a clinical pharmacist and as a medical advisor in industry. As a doctoral student, I am interested in epidemiologic and statistical methods that can be applied to disease registry data to inform policy and implementation of quality improvement measures.

PhD Students Feature



Eduardo Santiago Rodriguez , MPH

Education: University of Puerto Rico, Bayamón (BS, Human Biology); University of Puerto Rico, Medical Sciences Campus (MPH, Epidemiology)

I am interested in understanding the role of social and environmental factors on cancer health disparities, especially those observed in racial and ethnic minorities. During my time in the program I hope to get rigorous training on research methods and improve my quantitative and programming skills, while taking advantage of the resources and research opportunities in the Bay Area. Before coming to UCSF I worked as biostatistician at the Universidad Central del Caribe School of Medicine and the Puerto Rico Clinical and Translational Research Consortium for seven years. For my dissertation I would like to study issues impeding minority groups from getting timely screening and adequate treatment. I want to incorporate information already collected (i.e., electronic health records, medical insurance claims) and existing technology (i.e., geographical information systems and its applications) in the analysis of data obtained from cancer registries.

Epidemiologist of the future



Who is this intrepid young scientist, shown here assessing the nutritional content of her adorable sweater? Lea Rerolle, daughter of Francois Rerolle, born September 3rd.



PhD students: Sandeep Brar, Sepehr Hashemi, Alice Guan, Michelle DeVost, Jean Digitale and Dan Kelly (with Raj Kalapatapu and Megha Mehrotra) welcoming the new school year at The Ramp.

Accomplishments: Awards

Kelly, Dan

- 2018 Travel Award to ASTMH Conference

Langlais, Crystal

- Travel and registration scholarship to the University of Washington's Summer Institute in Statistical Genetics, Seattle, WA. July 11-26, 2018.

Irish, Amanda

- Achievement Rewards for College Scientists (ARCS) Scholarship, 2018.

Mooney, Alyssa

- Sorpotomist Doctoral Fellowship for Scientists Working to Advance Women's Health/Wellbeing/Rights

Rodriguez, Luis

- NIH-NIDDK F31 Ruth L Kirschstein Predoctoral Individual National Research Service Award to Promote Diversity in Health-Related Research 2018-2020.

Ray, Kathryn (PhD graduate)

- 2018 Annual Vittinghoff Innovation Award

Accomplishments: Publications

Kelly, Dan

Kelly JD, Hoff NA, Spencer D, Musene K, Bramble MS, McIlwain D, Okitundu D, Porco TC, Rutherford GW, Glymour MM, Bjornson Z, Mukadi P, Okitolonda-Wemakoy E, Nolan GP, Muyembe-Tamfum JJ, Rimoin AW. Neurological, cognitive, and psychological findings among survivors of Ebola virus disease from the 1995 Ebola outbreak in Kikwit, Democratic Republic of Congo: a cross-sectional study. *Clin Infect Dis*. 2018 Aug 10. doi: 10.1093/cid/ciy677. PMID: 30107392.

Kelly JD, Hickey MD, Schlough GW, Conteh S, Sesay M, Rutherford GW, Giordano TP, Weiser SD. Understanding why HIV-infected persons disengaged from pre-ART care in Freetown, Sierra Leone: a qualitative study. *AIDS Care*. 2018 Aug 26:1-4.

Kelly JD, Frankfurter R, Lurton G, Conteh S, Empson SF, Daboh F, Kargbo B, Giordano TP, Mukherjee J, Barrie MB. Evaluation of a community-based ART program after tapering home visits in rural Sierra Leone: a 24-month retrospective study. *SAHARA-J*. 2018 Dec;15(1):138-145.

Kelly JD, Mukadi P, Dhillon RS. Beyond vaccines: improving survival rates in the DRC Ebola outbreak. *Lancet* 2018 June 9

Dhillon RS, Srikrishna D, **Kelly JD**. Deploying RDTs in the DRC Ebola outbreak. *Lancet*. 2018 Jun 23.

Kalapatapu, Raj

Kalapatapu RK. "COMPRESS: Key questions to ask during shift changes in a psychiatric ER". November 2018. *Current Psychiatry*, page 8.

Eng, Chloe

Vable AM, **Eng CW**, Mayeda ER, Basu S, Marden JR, Hamad R, Glymour MM. Mother's education and late-life disparities in memory and dementia risk among US military veterans and non-veterans. *J Epidemiol Community Health*. 2018 Aug 6.

Engmann, Natalie

Oskar S, **Engmann NJ**, Azus AR, Tehranifar P. Gestational diabetes, type II diabetes, and mammographic breast density in a U.S. racially diverse population screened for breast cancer. *Cancer Causes Control*. 2018 Aug

Aiemjoy, Kristen

Altan E, **Aiemjoy K**, Phan TG, Deng X, Aragie S, Tadesse Z, Callahan KE, Keenan J, Delwart E. Enteric virome of Ethiopian children participating in a clean water intervention trial. *PLoS One*. 2018 Aug 16.

Rodriguez, Luis

Barquera S, Schillinger D, Aguilar-Salinas CA, Schenker M, **Rodriguez LA**, Hernandez-Alcaraz C, Sepulveda-Amor J. Type 2 Diabetes in People of Mexican origin: The Need for Collaborative Research and Action on Both Sides of the US-Mexico Border. *Globalization & Health*, 2018.

Mehrotra, Megha

Mehrotra ML, Amico KR, McMahan V, et al. The Role of Social Relationships in PrEP Uptake and Use Among Transgender Women and Men Who Have Sex with Men. *AIDS Behav*. May 2018:1-8.

Rodriguez con't

Jin Y, Kanaya AM, Kandula NR, **Rodriguez LA**, Talegawkar SA. Vegetarian Diets are Associated with Selected Cardiometabolic Risk Factors among Middle-Older Aged South Asians in the United States. *The Journal of Nutrition*.

Demb, Joshua

Demb J, Wei EK, Izano M, Kristchevsky S, Swede H, Newman AB, Shlipak M, Akinyemiju T, Gregorich S, Braithwaite D. Chronic inflammation and risk of lung cancer in older adults in the health, aging and body composition cohort study. *J Geriatr Oncol*. 2018 Aug 2.

Mooney, Alyssa

Mooney AC, Campbell CK, Ratlhagana MJ, Grignon JS, Mazibuko S, Agnew E, Gilmore H, Barnhart S, Puren A, Shade SB, Liegler T, Lippman SA. Beyond Social Diserability Bias: Investigating Inconsistencies in Self-Reported HIV Testing and Treatment Behaviors Among HIV-Positive Adults in North West Province, South Africa. *AIDS Behav*. 2018 Jul.

Langlais, Crystal

Mazza GL, **Langlais CS**, Kosiorek HE, Geyer H, Scherber R, Mesa R, Dueck AC. Utilization of patient-reported outcomes in myeloproliferative neoplasm clinical trials: analysis of ClinicalTrials.gov registrations.

Accomplishments: Conference Presentations

Rerolle, Francois

Francois Rerolle, Sophia Hocini, Andrew A. Lover, Emily Dantzer, Bouasy Hongvanthong, Toula Phimmakong and Adam Bennett. Quantifying Movement Patterns of Mobile Forest Workers during a Malaria Focal Test and Treat Intervention in Southern Lao PDR. *ASTMH Conference*, New Orleans.

Francois Rerolle, Sophia Hocini, Andrew A. Lover, Emily Dantzer, Bouasy Hongvanthong, Toula Phimmakong, John Marsahll and Adam Bennett. How mobile must mobile forest-workers be to sustain malaria transmission in the great Mekong sub-region? *ASTMH*, New Orleans.

Sturrock HJ, Roberts KW, Wegbreit J, Ohrt C, Gosling RD. Tackling imported

malaria: an elimination endgame. *Am J Trop Med Hyg*. (2015), pii 14-0256.

Langlais, Crystal

Langlais CS, Cowan JE, Broering JM, Kenfield SA, Van Blarigan EL, Cooperberg MR, Carroll PR, Chan JM. Obesity and prostate cancer recurrence following radical prostatectomy. *Prostate Cancer Foundation Annual Scientific Retreat*, October 2018 and also at the UCSF HDFCCC's Prostate Cancer Annual Scientific Retreat, November 2018.

UC-Wide Pancreas Tumor Consortium Conference, November 2018.

UC Davis Human Genomics Symposium Conference, November 2018.

Epstein, Adrienne

Comparison of Malaria risk Prediction Using Routine Surveillance Data and Serological Prevalence in the Pre-Elimination Setting of Zambezi, Namibia. *American Society of Hygiene and Tropical Medicine Annual Meeting*. New Orleans, LA, 2018.

Rodriguez, Luis

Oral presentation: Differences in Dietary Quality among Multiple US Racial/Ethnic Groups. *12th Annual Health Disparities Research Symposium*. San Francisco, CA, October, 2018.

The Obesity Society. Nashville, TN. November, 2018.

UPCOMING EVENTS

Friday, January 4, 2019

12:00 – 1:00pm

Dissertation research presentation by
Josh Demb

**Multilevel Factors in Cancer
Screening**

Monday, January 14, 2019

9:00 -12:00 pm, MH 2100

Guest lecture by Channele Howe
Assistant Professor, Brown University

**Selection Bias – Concepts,
Definitions and Tools**

Thursday, February 14, 2019

1:00-4:45 pm, MH 1407

Guest lecture by Elizabeth Rose
Mayeda, PhD

Assistant Professor, UCLA

Quantitative Bias Analysis

TBD

Guest lecture by Sherri Rose, PhD
Associate Professor, Harvard
University

**Computational Health Economics
and Outcomes**

Friday, May 3, 2019

12:00 – 1:00pm

Dissertation research presentation by
Megha Mehrotra

Answers, from top to bottom

Kathryn Ray, PhD graduate, receiving the 3rd Annual
Vittinghoff Innovation award for Methodologic
Innovation and Excellence in Epidemiologic, Clinical
or Translational Research.
. Shown here with Drs. Maria Glymour, Kirsten
Bibbins-Domingo and Jeff Martin.

Graduating students: Sarah Ackley, Caroline Tai,
Natalie Engmann and Kristen Aiemjoy

Alyssa Mooney, PhD presented her dissertation
“Sentencing Reform for Drug Possession in
California: Impacts on Hospital Visits and Racial and
Geographic Disparities in Crimincal Justice
Involvement.”

Shown here with her committee members: Drs.
Maria Glymour, Jacqueline Tulsky, Meghan Morris
and Torsten Neilands.

Dr. Mooney is now a postdoc at the California Policy
Lab, UC Berkeley.

PhD student, Crystal Langlais (middle seated),
discussing lifestyle with fellow students Chloe Eng
and Megha Mehrotra.

