



# newsletter

#### **SPRING 1 2018**

#### LETTER FROM THE CHAIR

Dear SBS community,

Welcome back from winter break. It was delightful to catch up with you all at our outstanding New Year's Party, and to learn about all the exciting & educational things you have been up to during J-term. Personally, I managed to binge on a bunch of Netflix shows (the Great British Baking Show, Black Mirror & whatnot), and my New Year resolution is to exercise more often to counteract the hours of screen time.

Speaking of resolutions, it's not too late to get the 'flu shot, according to the CDC (<a href="http://www.wbur.org/">http://www.wbur.org/</a>
<a href="http://www.wbur.org/">onpoint/2018/01/23/its-still-not-too-late-to-get-a-flu-shot</a>). This year's strain is a particularly nasty one, according to the expert I had lunch with at the WHO Collaborating Centre for



Infectious Disease Epidemiology and Control at Hong Kong University SPH last week. So stop procrastinating if you haven't already got your shot – or at the very least stay home if you're feeling "peaky".

I'd like to (again) extend a very warm welcome to Professor Henning Tiemeier who just joined our Department to direct the MCH training grant. In February, our grants managers will be migrating to our Landmark facilities. I'm looking forward to hosting more events & activities in our space @Landmark.

I wish everybody a stimulating & fun-filled 2018.

Ichiro

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#### **Featured Events**

Rachel Shelton talk Wednesday, January 31, 12-1pm, DFCI

CHH/MHSA Journal Club Wednesday, February 7, 1-2pm, Kresge 606

Fattitude Documentary Screening Tuesday, February 13, 5:30, FXB G13

Henning Tiemeier talk Monday, March 19, 1-2pm, FXB G13

Photo credit: Flu Shots by Paul Swansen is licensed under CC BY-ND 2.0

## **Faculty Spotlight**



Dr. Henning Tiemeier was recently appointed as the Sumner and Esther Feldberg Professor of Maternal and Child Health.

Can you tell us about your research background and what drew you to the SBS Department and more specifically to Maternal and Child Health?

About 15 years ago, I began studying child development and in particular child psychiatric problems. Previously, I had conducted research on late-life depression and had managed the data collection of the Rotterdam Study. When they asked me to help set up a population-based birth cohort, Generation R in Rotterdam, I wondered if it was no problem that I knew little of child development. My mentor just replied that the study starts prenatally and I would have time to learn before the problems in infants and toddlers occurred. So I got the chance to make mistakes and implement unusual assessments.

I view all child psychiatric problems as neurodevelopmental, thus we collected imaging data with ultrasound, even before the first child was born, and in neonates. Now Generation R has become the world's largest preadolescent MRI imaging cohort. All child problems are rooted in the family, so we assessed attachment with the strange situation paradigm (fathers too) and mother-child interaction. All child psychiatric problems are social, thus we assessed friendship, peer interaction and bullying. I teach that child psychiatry is particularly challenging, because not only are there no biomarkers, but one cannot easily interview a child, thus research relies on observation and reports from others. Teaching brought me to HSPH in 2015. It was fun to develop a course around selected disorders but really teach psychiatric epidemiological challenges, i.e., reverse causality or time trends. In the end, the course helped me, I got to know HSPH as an ambitious yet friendly environment.

What are the next objectives in your research, and do you see opportunities in connecting child psychiatric epidemiology with the Maternal and Child Health curriculum?

Child psychiatric disorders are the most common health problem of children in the Western World and the burden, like in adulthood, often exceeds that of physical diseases. Research and curriculum in MCH can best include a focus on child (and maternal) behavior. Also, the classical themes of MCH, the family and social environment of children, are critical to children's psychiatric problems. Poverty, poor parenting, poor prenatal and infant nutrition, parental psychopathology are established risk factors for psychiatric problems, e.g. disruptive and withdrawn behavior, in children. Having said this, it is not my goal to transform MCH to a child psychiatric research line. MCH research has been crucial to understand the causes and consequences of infant mortality and preterm birth, environmental exposures or nutritional deficits, and has witnessed the development of many effective interventions. Yet, important

## Faculty Spotlight (cont.)

questions remain. Why can we not deliver these interventions on a large scale? Why do these problems persist in disadvantaged groups? Often, we know little about the long-term prognosis, for example, is there accelerated ageing in children born preterm? The challenge for a modern MCH is exactly this combination of health service, public health research with fundamental research. I aim to add specific data collections to clinical cohort or registry data collection. Think of observational data to address parenting more validly, neuroimaging of neonates with 3-D ultrasound, biological sampling or experience sampling to monitor sleep for example. It is the MCH approach accounting for family and environment that will eventually advance biological research such as of the microbiome in children.

# Can you say more about the interplay between perceived negative behaviors and children's home environments?

There is a long tradition in developmental science of studying the interplay between home environment and child problem behavior. What fascinates me is that so many aspects of the environment affect children. I can talk to any SBS researcher, whether about health literacy, discrimination, stress and trauma, social networks, or smoking, all these environmental risks are related to child problem behavior. Yet, most exposed children never develop problems and those that do likely grow out of it.

What also intrigues me is how children's behavior shapes their environment and, importantly, physical health. I once taught students reversed causality in Psychiatry asking to exchange exposure and outcome, to review the background and design a study for the reversed question. These questions were equally relevant and we began asking how a child's temperament influences parenting, emotions shape the brain structure, or behavior determines epigenetic, microbiotic or immune function changes. Recently, we showed how much more child anxiety and withdrawn behavior

affect structural brain connectivity than the reverse. Thus if a child is shy, socially withdrawn or fearful this can shape brain structural development, like regular physical exercise or music lessons do. Anxiety is an understudied problem, it is very amenable to treatment but it can herald future psychiatric problems. I argue that anxiety and other emotional problems both determine and mediate environmental effects on brain development (but also on physical health). "Reverse causality" is common in most areas of behavioral research, my groups showed that Vitamin D insufficiency is more consequence than cause of depression, and ADHD determines epigenetic changes. Thus, I am excited that my first collaboration at SBS, with Laura Kubzansky, is on the relation of child assets to physical health.

Back to MCH, our goal is to lastingly improve the health of children. If we understand how maternal and child behavioral problems shape the environment, it will inform research and implementation, we may learn why some interventions do not work, and even why some physical diseases persist.

# Lastly, how can our community get to know more about your research? Do you have any upcoming talks or seminars planned?

Students are very welcome to come by to my new office on the 6th floor, then I will be having an SBS-sponsored talk on Monday, March 19th at 1:00pm, titled "Early Adversity, Brain Development and Child Behavior Problems." I will also be attending the remaining Maternal and Child Health seminars on Wednesdays throughout the Spring semester.

#### Thank you, Henning!

-Interview by Whitney Waddell

### **Leaders in Health**

Leaders in Health (LIH) is an 8-week training program aimed at strengthening community health initiatives and building the capacity of community practitioners and residents through introductory training in public health research and science. Participants attend interactive training sessions and completed assignments in order to learn the fundamentals of community-based participatory research, program design, and evaluation. The program, taught by Dr. Rebekka Lee and Ra'Shaun Nalls was designed as a co-learning experience for both local community professionals and HSPH students.

Ten individuals participated in LIH this year. Participants came from local community organizations such as the Boston Alliance for Community Health (BACH), Action for Boston Community Development (ABCD), Urban Edge Housing Corporation, and the Cambridge Public Health Department. Their projects were wide-ranging, from Nancy Smith's project setting up opportunities to teach Muslim women and girls to swim, to Karen Gately & Elaine Adam's initiative to increase use of wellness space and programming to improve residents' health at the Roxbury Tenants of Harvard using a train-the-trainer model.



**2017** Leaders in Health participants (left to right): Mary Ann Nelson, Jean Dolin, Ronald Lammy, Corina Pinto, Sahar Lawrence, Karen Gately, Nancy Smith, Elaine Adams, Irvienne Goldson, Nancy Rihan-Porter.

The Leaders in Health program provides students at HSPH who are interested in community engaged work with an opportunity to communicate learned public health concepts into practical knowledge. Hila Bernstein and Lauren Southwick, both MPH-HSB students, served as teaching assistants and peer mentors in the program, reviewing assignments, providing information, and meeting with participants. "LIH was an excellent way to apply what we have



learned in classes to a practical experience," says Hila. "It was interesting to connect what LIH participants discussed from their experience with concepts and material that I've read about for other courses." Both Lauren and Hila had previously taken Dr. Lee's course, SBS 265: Program Planning & Evaluation and found the course to be instrumental to their ability to teach and support participants. They expressed that other SBS courses they had taken proved to be important as well, including SBS 245: Social and Behavioral Research Methods, SBS 509: Health Communications, and SBS 501: Community-Based Participatory Research. The program also offered the opportunity for self-reflection and to establish meaningful relationships. "I learned guite a bit," says Lauren. "Leaders in Health enforces cultural humility. It was a refreshing hands on learning experience that truly translated our classroom lecture into action."

By the end of the program, LIH participants came away with new skills and knowledge that will help them continue to make a difference in their communities and students came away with invigorated interest in community health and teaching. "LIH reinforced that I'm interested in community engaged work and that teaching public health concepts is something that I'd like to pursue going forward," says Hila. Lauren agrees. "It helped me fine tune my teaching and instruction skills, and helped me build confidence being a 'public health professional'. Moving forward I hope to work in research with community co-created programs. I firmly believe Leaders in Health helped me build this skillset."

To learn more about Leaders in Health, visit: <a href="https://www.hsph.harvard.edu/prc/community-engagement/leaders-in-health-community-training-program/">https://www.hsph.harvard.edu/prc/community-engagement/leaders-in-health-community-training-program/</a>

-Emilie Doan Van, MPH-HSB '18

# **Annual New Year's Party**



Laura Perez with face paint by Kareema (Kiki) Roushdy.



Live music by Camelia Latin Jazz Band.



Jourdyn Lawrence, Elizabeth Solomon, Christine Mitchell and Natasha Sokol.



Felton Earls, Maya Carlson, Marie McCormick and Henning Tiemeier.



Robyn Keske, Caroline Huntington, Natasha Rossi Minor, Amanda Harris, Hope and Geoff Tierney and Jessica Davine.



Michelle Woodford Martin, Joseph Bruch, Ashley Gripper, Jackie Jahn and Kristen Nishimi.

Photos: Whitney Waddell

#### **Publications**

- **Bekalu, M.A.**, Minsky, S. and Viswanath, K. Beliefs about smoking-related lung cancer risk among low socioeconomic individuals: the role of smoking experience and interpersonal communication. Global Health Promotion. 2017 Nov (Epub ahead of print).
- **Bekalu, M.A.**, Ramanadhan, S., Nagler, R., Bigman, C., Viswanath, K. Graphic and arousing? Emotional and cognitive reactions to tobacco graphic health warnings and associated quit-related outcomes among low SEP populations. Health Communication (accepted).
- Bekalu, M.A., Bigman, C., Lin, L., McCloud, R., Viswanath, K. (2017) The Relative Persuasiveness of Narrative versus Non-Narrative Health Messages in Public Health Emergency Communication: Evidence from a Field Experiment. Preventive Medicine. https://doi.org/10.1016/ j.ypmed.2017.11.014
- **Geller AC**, Jablonski NG, Pagoto SL, et al.. Interdisciplinary Perspectives on Sun Safety. JAMA Dermatol. 2017 Nov 8. doi: 10.1001/jamadermatol.2017.4201.
- **Hswen, Y.**, Brownstein, J. S., Liu, J., & Hawkins, J. B. (2017). Use of a Digital Health Application for Influenza Surveillance in China. *American Journal of Public Health*, (0), e1-e7.
- **Hswen, Y.**, Naslund, J. A., Chandrashekar, P., Siegel, R., Brownstein, J. S., & Hawkins, J. B. (2017). Exploring online communication about cigarette smoking among Twitter users who self-identify as having schizophrenia. *Psychiatry Research*, *257*, 479-484.
- **Hswen, Y.,** Leveraging online big data to monitor LGBT hospital care. Human Rights Campaign: Time to Thrive. Feb 16-19 2017. Orlando, FL USA.
- Kamada M, Kitayuguchi J, Abe T, Taguri M, Inoue S, Ishikawa Y, Bauman A, Lee IM, Miyachi M, Kawachi I. Community-wide intervention and population-level physical activity: a 5-year cluster randomized trial. *International Journal of Epidemiology* (epub ahead of print) <a href="https://doi.org/10.1093/ije/dvx248">https://doi.org/10.1093/ije/dvx248</a>
- **Kamada M**, Shiroma EJ, Buring JE, Miyachi M, Lee IM. Strength training and all-cause, cardiovascular disease, and cancer mortality in older women: a cohort study. *Journal of the American Heart Association*. Oct 2017;6:e007677. https://doi.org/10.1161/JAHA.117.007677
- **Kawachi I**, Subramanian SV. <u>Social epidemiology for the 21st century.</u> Soc Sci Med. 2017 pii: S0277-9536(17)30651-2. doi: 10.1016/j.socscimed.2017.10.034
- Kawachi I. <u>It's All in the Game-The Uses of Gamification to Motivate Behavior Change.</u> JAMA Intern Med. 2017 Nov 1;177(11):1593-1594. doi: 10.1001/jamainternmed.2017.4798.
- Kenney EL, Wintner S, Lee RM, Austin SB. Obesity prevention interventions in US public schools: Are schools using programs that promote weight stigma? *Prev Chronic Dis* 2017; 14. <a href="https://www.cdc.gov/pcd/issues/2017/16">https://www.cdc.gov/pcd/issues/2017/16</a> 0605.htm
- **Kim, E.S.,** Kawachi, I., Chen, Y., Kubzansky, L.D. (2017). The association between purpose in life and objective measures of physical function in older adults. JAMA Psychiatry. 4, 1039-1045.
- **Krieger N**, Kim R, Feldman J, Waterman PD. Using the Index of Concentrations at the Extremes at multiple geographic levels to monitor health inequities in an era of growing spatial social polarization: Massachusetts, USA (2010-2014). *Int J Epidemiol* (in press).
- Krieger N. The censorship of seven words by Trump's CDC could well cost American lives. New York Daily News (op-ed). December 18, 2017; on-line: <a href="http://www.nydailynews.com/opinion/censorship-words-trump-cdc-cost-lives-article-1.3707447">http://www.nydailynews.com/opinion/censorship-words-trump-cdc-cost-lives-article-1.3707447</a>
- **Schnake-Mahl AS**, Sommers BD. Health Care In The Suburbs: An Analysis Of Suburban Poverty And Health Care Access. *Health Affairs*, 2017: 36(10).
- Trudel-Fitzgerald C, Tworoger SS, Poole EM, Zhang X, Giovannucci EL, Meyerhardt JA, Kubzansky LD. Psychological Symptoms and Subsequent Healthy Lifestyle After a Colorectal Cancer Diagnosis. Health Psychol. 2017 Nov 20. doi: 10.1037/hea0000571. [Epub ahead of print]

#### **Awards & Announcements**

- Madina Agénor will be a guest on Basic Black on WGBH on February 9 at 7:30pm EST. She will be discussing LGBTQ health, with a focus on communities of color.
- **Kayoll Galbraith-Gyan** presented a poster at APHA within the Womens' Heath Caucus Section on the health beliefs of African American parents' and daughters' about HPV vaccine acceptance.
- Yu-Tien Hsu, MPH '18 received an audience-favorite prize for her poster, "Addressing Social Determinants of Health by Food Security" at the MPH-65 Poster Night on November 7.
- Masamitsu Kamada and Angie L. Cradock will teach a nanocourse, An Introduction to Physical
   Activity: From Wearable Technology to Social Interventions on Jan 25th and Feb 1st. This is a
   condensed mini-course over 6 hours (2 days) and is free of charge. https://hsph.me/physicalactivity
- **Eric S. Kim** was appointed by the ChanZuckerberg Initiative, founded by Mark Zuckerberg and Priscilla Chan, to be a subject matter specialist on the topic of purpose/meaning in life.
- Alina Schnake-Mahl, SD '20 received an award from the American Public Health Association 2017,
   Community Health Planning and Policy Development Section for best student abstract.
- Alvin Tran, SD '18 presented his research at the 3rd Biennial Scientific Conference: Dying to be Beautiful? Body Image, Eating Behaviours and Health in the Caribbean.
- Dr. K. "Vish" Viswanath, Lee Kum Kee Professor of Health Communication is starting two exciting international public health projects, with awards from the Bill and Melinda Gates Foundation (BMGF).
   1) Building Public Agenda and Policy Support for Evidence-Based Public Health 2) Accelerating Adoption of Responsive Practices in Health Programming.
- Whitney Waddell was nominated for and accepted a position as an HUCTW Local Representative at HSPH. She looks forward to connecting HUCTW members to the benefits and resources available to them.

## **Arrivals & Departures**

- Amanda Harris joined our team in November as an Executive Assistant working with Ichiro Kawachi,
  Nancy Krieger and Laura Kubzansky. She comes from Tufts Medical Center, where she worked as a team
  leader in the Breast Health Clinic, and also held a position as the assistant to the Chief of Dermatology.
  Amanda enjoys finding ways to help others in her spare time by volunteering with non-profit organizations.
  She is excited to be a part of the SBS team, and is the newest member of the engagement committee.
- After being part of the SBS Dept for almost 15 years, Armand Inezian has accepted a new position with the RAST Team, in the Sponsored Programs Administration office. At RAST, Armand will be serving as a Team and Project Leader. Armand is still at his SBS office until February, when he will join many others and move to the Landmark Building in Fenway. In order facilitate a smooth transition, Armand is continuing to work with the PI's in his portfolio and will help to train his replacement. We wish him well in his new position!

Congratulations to
Masayoshi Zaitsu and
family on the birth of
their son, Shoushiro. He
was born on December
1, 2017 and weighed
7 lbs 13 oz.





Congratulations to
Mesfin Bekalu and his
wife, Lela Fessessu!
They welcomed their
son, Nathan on
December 12, 2017. He
was a healthy, 8 lbs 2 oz.

### **Events**



If Work Makes You Happy, Is it Work? Exploring the Intersections of Work, Happiness, and Wellbeing

Dr. Gregory Wagner, Adjunct Professor of Environmental Health and Senior Advisor at the Harvard Center for Work, Health, and Wellbeing Wednesday, January 24<sup>th</sup> from 1:00-1:50pm in FXB G13.



Advancing understanding of the sustainability of lay health advisor programs to address cancer disparities

Rachel C. Shelton, ScD, MPH, Assistant Professor, Mailman School of Public Health, Columbia University

Wednesday, January 31, 2018, 12:00-1:00pm, Dana-Farber Cancer Institute, Dana 1130

LEE KUM SHEUNG CENTER FOR HEALTH AND HAPPINESS

HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

# Center for Health and Happiness/Mental Health Student Alliance Monthly Journal Club

Come discuss interdisciplinary research covering a range of epidemiologic, biologic, behavioral and social topics related to positive health and well-being!

Wednesday, February 7, 2018, 1:00-2:00pm in Kresge 606.



#### Fattitude documentary film screening

STRIPED and ODI will be screening the documentary, **Fattitude**. There will be a panel discussion with the creators of the film directly following the screening.

Tuesday, February 13, 2018, 5:30pm in FXB G13.



# Early Adversity, Brain Development and Child Behavior Problems

Henning Tiemeier, Sumner and Esther Feldberg Professor of Maternal and Child Health

Monday, March 19, 2018, 1:00-1:50pm in FXB G13

## Questions, suggestions, ideas? Email us: sbs@hsph.harvard.edu

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