LEE KUM SHEUNG CENTER FOR HEALTH AND HAPPINESS

ANNUAL REPORT 2020





HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH













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GREETINGS FROM THE

CENTER CO-DIRECTORS

We are delighted to share the fourth annual report on the activities and accomplishments of the Lee Kum Sheung Center for Health and Happiness at the Harvard T.H. Chan School of Public Health. Through the generous support of the Lee Kum Kee family, we have continued to advance scientific understanding of the connections between positive psychological and social well-being, positive social environments, and physical health. Our work further advances efforts to achieve a shift from deficit-based thinking to an understanding of well-being in the broadest sense—psychological, social, and physical health, a goal with profound implications for health practice and policy.

The Center has worked to establish itself as a hub at Harvard and beyond for primary research and collaboration on the science of positive health and well-being and its translation into practice and policy. Our work spans multiple disciplines—including health communications, psychology, sociology, exercise physiology, basic biology, epidemiology, medicine, and population sciences—and we have taken further steps this past year to foster our interdisciplinary network. We have invited three new members to our Scientific Advisory Board, whose expertise will inform the board and the guidance it provides to the Center with regard to refining and working toward our long-term goal of advancing the science and practice of positive health. We have also appointed a new research scientist and three new affiliate scientists, and welcomed several new students and postdoctoral researchers. To support our community's work, we have continued to fund promising research proposals through our second annual Innovations in Positive Health grant program and our fourth annual Dissertation Research Awards.

The Center is pleased to continue and to expand our regular programming, including our seminar series, which this year brought the theme of resilience to students, staff, faculty, and fellows across the Harvard community. We have hosted multiple special interest-group meetings and our scientists, affiliates, and students have presented their work at a range of conferences. In addition, we developed a summer short course to be offered annually, in collaboration with University College London. The inaugural course was set to launch in London in July 2020 (now postponed to 2021 due to COVID-19). Entitled "Exploring the Linkages between Mental Well-Being and Physical Health Outcomes," the course will introduce the next generation of scholars to the cutting-edge science that sits at the nexus of epidemiology, social science, psychology, and medicine, with the goal of stimulating novel, interdisciplinary work that supports a healthier tomorrow for generations to come.



Center Launch 2016, Photo credit: Tony Rinaldo

In Spring 2020, the COVID-19 pandemic necessitated postponing several major events and offerings. We have included information about these events in this Annual Report and we look forward to rescheduling them in the upcoming 2020–2021 academic year. In light of the pandemic and resulting changes to University operations during the Spring semester, the Center has been focusing on increasing our digital offerings and exploring opportunities for creating webinars and libraries of resources that are accessible to the Harvard community and the public. We are prioritizing the development of offerings in line with the Center's seminar series theme of *resilience*. This focus not only draws on Center expertise but also seeks to be highly responsive to current events by providing relevant resources to our community.

This year has seen meaningful growth in the two pillars that define the Center's scope: (1) positive health and (2) translation and communication. In this report, we highlight three themes that have been of particular interest to the Center over the past year and cut across the pillars: longevity, resilience, and workplace well-being. To give a flavor of the Center's activities over the past year, in this report we highlight selected research and programming for each of these themes.

We extend our deepest gratitude to the Lee Kum Kee family for their generosity in establishing our Center and for making our work possible. As we continue to engage with scholars, students, communities, and practitioners, we look forward to another year of impact in this dynamic and promising field.



Dr. Laura Kubzansky, Co-DirectorLee Kum Kee Professor of Social and
Behavioral Sciences



Dr. Kasisomayajula "Vish" Viswanath, Co-Director Lee Kum Kee Professor of Health Communication

OVERVIEW OF CENTER

PROGRAMMING

The Center convenes and collaborates with faculty, researchers, practitioners, policymakers, postdoctoral fellows, and students from across Harvard University and beyond through shared research activities, roundtables, working groups, seminars, and workshops. We leverage the expertise of leaders in various disciplines to help identify and prioritize key areas of research and growth. We work to produce new knowledge, build the capacity of young scholars and our community, and translate and communicate research to influence practice and policy. Below is an overview of the major activities offered by the Center. Specific activities are highlighted in the later sections on longevity, resilience, and workplace well-being.

Seminar Series

The Center continues to host a monthly public seminar series to bring speakers and researchers to Harvard during the academic year. Each 50-minute seminar focuses on a topic critical to the Center's mission. The 2019–2020 seminar series was organized around the theme of resilience, and featured presenters from Columbia University, RAND Corporation, the University of Oxford, and beyond. Seminars typically attract an audience of students, faculty, staff, and postdoctoral fellows, as well as members of the general public. Attendance at these seminars continues to be strong, with standing-room-only crowds of 60 to 80 attendees at most events. Recordings of the seminars are available for public viewing on the Center's website (hsph.harvard.edu/health-happiness).

Working Group on Well-Being Measurement

Since 2017, the Center has supported a working group on the measurement of well-being, led by Center Affiliate Dr. Tyler VanderWeele and Center Research Scientist Dr. Claudia Trudel-Fitzgerald. The group meets quarterly to explore the challenges related to well-being measurement and research and to investigate the difference between various dimensions of well-being. In 2019, the group published a scoping review in *BMC Public Health*.

Workshops

On a yearly basis, the Center convenes a multidisciplinary group of experts to investigate relevant topics in the field of health and happiness. Workshops are oriented toward addressing pressing topical questions related to measurement, novel research paradigms, developing interventions, and translating science into effective policy. Historically, workshop participants have been academics and policymakers representing such fields as psychiatry, epidemiology, psychology, organizational behavior, and the social and behavioral sciences. The workshops serve as catalysts for developing papers, creating and refining research agendas for future work, and building networks of scholars.



Dr. Claudia Trudel-FitzgeraldLee Kum Sheung
Center Research Scientist
National Student Leadership
Conference, Boston



Innovations in Positive Health Grant

The Innovations in Positive Health grant is a competitive grant program open to all Harvard University faculty, research scientists, and postdoctoral research scholars. The grant supports research at early stages of development that focuses on positive health science or communication and translation sciences related to positive health science. Projects are prioritized for funding when they: (1) integrate the theories, questions, and methods of two or more disciplines; (2) involve high payoff in terms of opening new areas of inquiry or provide crucial preliminary data for preparing larger grant proposals; or (3) explicitly connect faculty and scholars across departments and schools.

Workshop on the Translation of Well-Being Research into Policy and Practice, 2019 Photo credit: Kent Dayton

Dissertation Research Award

Available to full-time Harvard doctoral candidates, the Lee Kum Sheung Center for Health and Happiness Dissertation Research Award assists students working on relevant topics with research costs. Each proposal that the Center supports brings a novel approach to the field of positive health science or another closely related field. By investing in the dissertation award program, the Center advances rigorous and interdisciplinary research on health and happiness and supports the development of the leading researchers and scholars of tomorrow.

Positive Health Interest Group

Launched in the 2019–2020 academic year, the Positive Health Interest Group convenes Harvard graduate students, postdoctoral research fellows, and early-career researchers for monthly discussion. Led by Center postdoctoral research fellows and students, the group discusses novel research and its translation into policies and programs to improve outcomes at the population level. The goal of the group is to shift the prevailing orientation of public health from disease prevention to well-being by considering positive factors and conditions from the individual (e.g., psychological, behavioral) to the societal (e.g., social environments, policy) levels and how they may influence health. Members develop professional competencies, including skills related to the conduct of research, leading presentations, and career networking, as they build a collaborative, peer-led learning and mentorship community at the Harvard Chan School.

Positive Health Interest Group objectives

To shift the prevailing orientation of public health from disease prevention to well-being

To learn about novel research in the field of positive health and its translation into policies and programs that improve outcomes at the population level

To build professional competencies, including skills related to the conduct of research, leading presentations, and career networking

To foster a collaborative, peerled learning and mentorship community at the Harvard T.H. Chan School of Public Health

THEMATIC

FOCUS

LONGEVITY

In the context of the Center's work, longevity and well-being refer both to how well-being impacts longevity and to how an aging population can achieve greater longevity with good health. Through our programming and research, the Lee Kum Sheung Center for Health and Happiness has focused specifically on determinants of "healthspan" (e.g., aging with well-being). Research and conversations in this field have the potential to inform policy and practices as we look to how health and happiness promote both longevity and quality of life as individuals age.

Center Symposium: Beyond Longevity: Achieving Well-being in Healthy Aging

Originally scheduled for March 25, 2020, the Center's symposium, *Beyond Longevity: Achieving Well-being in Healthy Aging*, was developed to bring together an audience of students, scholars, and community members for a half-day program. Due to the COVID-19 pandemic, the event was postponed (currently planned for the 2020–2021 academic year, circumstances permitting). The symposium will be co-hosted by the Harvard Center for Population and Development Studies and will examine aging from a positive health perspective, with a particular focus on social and psychological well-being in aging.

Expert speakers will discuss current understandings of the social and environmental factors likely to support healthy aging, the roles happiness and positive mental health may play in physical health and longevity, promising interventions and policy approaches, and ideas for a future research agenda. The symposium will advance Harvard Chan's priority area on reimagining aging, contributing to the conversation on how aging individuals and societies can grow stronger, and the role happiness and positive mental health may play in physical health and longevity.

Speakers

Lisa Berkman

Harvard T.H. Chan School of Public Health

Laura Carstensen

Stanford Center on Longevity

Sandro Galea

Boston University

Laura Kubzansky

Harvard T.H. Chan School of Public Health

Anthony Ong

Cornell University

K. "Vish" Viswanath

Harvard T.H. Chan School of Public Health

Robert Waldinger

Harvard Medical School/Massachusetts General Hospital

Michelle Williams

Harvard T.H. Chan School of Public Health



Center Workshop: Interventions to Modify Psychological Well-Being: What Works, What Doesn't Work, and an Agenda for Future Research

The Lee Kum Sheung Center for Health and Happiness scheduled a workshop for Spring 2020 focusing on positive psychological well-being (PPWB) interventions that can improve the healthspan at a population level in a variety of settings. Due to the COVID-19 pandemic, the event was postponed and is currently planned for the 2020–2021 academic year, circumstances permitting. The workshop will bring together a multidisciplinary group of experts to address key questions regarding the development and scale-up of effective and meaningful PPWB interventions and how to apply them in the workplace, communities, schools, or other settings. While a growing body of research indicates that various facets of psychological well-being can positively influence health-relevant behaviors and physical health outcomes across the healthspan, less is known about how best to develop, assess, and implement effective interventions to improve psychological well-being at scale.

The two-day workshop will build on insights gained from existing research and seek to broaden a positive health science perspective by evaluating strategies for intervention and prevention that could lead to improved population health. The convening will result in an expansion of the knowledge base around the use of interventions to improve psychological well-being.

Workshop goals

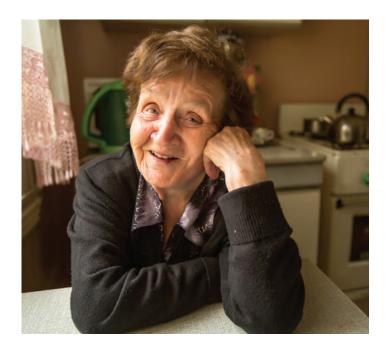
To assess the knowledge base around the use of interventions for enhancing PPWB

To evaluate which types of PPWB interventions are optimal for specific settings (e.g., health care, workplace, communities)

To discuss issues related to scalability of interventions for large-scale use in various populations, and methods for tracking outcomes

The Center's 2018 workshop on Happiness, Well-being, and Measurement resulted in the publication of *Measuring well-being: Interdisciplinary perspectives from the social sciences and the humanities* (Oxford University Press, in press), written by workshop participants and collaborators. This edited volume explores conceptual and practical challenges in measuring well-being. Given the bewildering array of measures available, and ambiguity regarding when and how to measure particular aspects of well-being, knowledge in the field can be difficult to reconcile. Representing numerous disciplines, including psychology, economics, sociology, statistics, public health, theology, and philosophy, contributors consider the philosophical and theological traditions on happiness, well-being, and the good life, as well as recent empirical research on well-being and its measurement. Leveraging insights across diverse disciplines, they explore how research can help make sense of the proliferation of different measures and concepts, while also proposing new ideas to advance the field.

RESEARCH PROJECTS RELATED TO LONGEVITY



Positive Psychological Well-Being to Improve Healthy Aging

In collaboration with AARP and UnitedHealth Group, Center Affiliate Research Scientist Dr. Eric S. Kim continues to assess the feasibility of translating promising psychological well-being interventions into engaging exercises that can be scaled and delivered to older adults. The overarching goals of the interventions are to lower physical and psychological morbidity, lower health care expenditures, and promote an enhanced prognosis if illness does strike. The research team first identified and evaluated a range of interventions that target different dimensions of positive psychosocial well-being. Subsequently, the researchers ran focus groups and conducted qualitative interviews with older adults to gain greater insight into the likely effectiveness of different interventions. After gathering this information, the team has been testing the feasibility of the interventions in older adult populations.

TOWERS Study

Voice-first (smart speaker) technology, such as the Amazon Echo or Google Home, shows great promise in reducing social isolation and assisting in healthy aging through removing traditional barriers to device usage (such as navigating screens and keyboards) and providing an easy-to-use, conversational format for information engagement.

The purpose of the Center-funded TOWERS Study, led by Center Co-Director Dr. Vish Viswanath and Dr. Rachel McCloud, a research scientist, was to 1) conduct a feasibility study on the use of the Echo Dot among older adults (aged 62–85) of lower socioeconomic position (SEP) living in a subsidized housing community for seniors, and 2) to determine if use of the Echo Dot increased well-being or decreased loneliness over the study period. Each participant was followed for a three-month period. Echo engagement was measured using usage data; pre- and post-test surveys that measured loneliness, well-being, and device usability; and process data notes gathered by study staff in weekly interactions with participants.

Preliminary findings indicate the promise of using the device. Most participants embraced the Echo Dot and used the device at least weekly, and many participants incorporated the Echo Dot into their daily routine, such as requesting the weather, playing music, and setting reminders and alarms. These actions, while involving simple commands, provided meaning to participants by anchoring them to the date and time of day, helping them during sleepless nights, and providing "another voice to talk to." This study shows the promise of smart speaker technology in the lives of seniors, providing a potential valuable avenue to promote positive health.



Optimism and Exceptional Longevity

What are the behavioral and biological mechanisms that underlie associations between optimism and exceptional longevity? Along with Center-affiliated researchers and graduate students, Center Co-Director Dr. Laura Kubzansky and Center Affiliate Dr. Francine Grodstein are conducting an NIH-funded project, called "Optimism and Exceptional Longevity," to answer this question.

The research to date has found that women with higher optimism levels had a greater likelihood of reporting a healthy lifestyle over the 10-year follow-up period.

With respect to the biological mechanism, extensive investigation of optimism in relation to epigenetic markers has shown consistently null results. Overall, the project has suggested that effects of optimism on decelerated aging are partially due to the healthier lifestyles more optimistic people are likely to engage in, but not to epigenetic changes. The team is now investigating other biological mechanisms to explain the robust findings linking optimism to greater longevity.

The team is also investigating whether researchers can capture positive psychological attributes in ways other than by using basic paper-and-pencil tests (e.g., through use of social media data), collecting data within a large-scale, long-running study of women. Working with an existing smartphone app, the researchers developed a customized version designed to download participant social media data, while maintaining complete privacy of the data. The team is working with collaborators with expertise in natural language processing and machine learning methods to "read" the social media data and assess levels of psychological attributes. Developing novel methods of assessing psychosocial factors will provide new tools for obtaining measures of key positive assets at low cost and low participant burden. Such tools will make it possible to evaluate effects of these assets more widely and potentially more rapidly.

Behavioral mechanisms

The research looks at how optimism relates to a healthy lifestyle, measured by considering:



RESILIENCE

Individuals considered resilient are those who maintain or regain positive mental health and/or functioning despite exposure to adversity. Resilience is thought to be influenced by multiple factors, including genetic variation, social and community environments, and behavioral patterns.

The Lee Kum Sheung Center for Health and Happiness is particularly interested in examining resilience, on the individual, community, and policy levels, to assess both the determinants of resilience and the downstream effects on psychological well-being and physical health outcomes. Through our research and programming, we are examining the factors that influence resilience in individuals and communities, how policy and practices can promote greater resilience, and the effects of resilience on other health outcomes. In fact, it is an especially timely topic, given current circumstances with the COVID-19 pandemic. Drawing on the work of the Center, we have developed a set of resources for scholars interested in studying resilience, as well as for the lay public, on the science of resilience (hsph.harvard.edu/health-happiness/resilience-resources).

CLIMATE IMPACT ON PHYSICAL HEALTH:

Changes in fitness and activity level Heat-related illness

Allergies

Increased exposure to waterborne and vector-borne illness

CLIMATE IMPACT ON MENTAL HEALTH:

Increased stress, anxiety, grief, or depression

Increased strains on social relationships

Increased substance abuse

Post-traumatic stress disorder

CLIMATE IMPACT ON COMMUNITY HEALTH:

Increased interpersonal aggression Increased violence and crime Increased social instability

Decreased community cohesion

Positive Health Interest Group

For the 2019–2020 academic year, the Positive Health Interest Group focused on resilience. The monthly sessions, led by Center Postdoctoral Fellow Dr. Farah Qureshi, featured different thematic areas within the field of resilience, including migration, climate change, early childhood development, and interventions.

During the meeting on climate change, students reflected on the actual and potential impact of climate change on population health and discussed the ways in which their work might align with a climate resilience perspective. The group also considered the ways in which the promotion of positive health might align with climate change response efforts.

"This may be the first time in the history of the United States that there are children wondering whether they are going to have a future, whether they should have children as a result of the potential for climate change to get worse and worse."

Gina McCarthy

President and CEO, Natural Resources Defense Council; Professor of the Practice of Public Health, Harvard T.H. Chan School of Public Health; Former Administrator, U.S. Environmental Protection Agency (2013–2017)

Positive Health Interest Group session, 2019 >

Photo credit: Melia Dunbar

2019-2020 Seminar Series

In 2019–2020, the Center's Seminar Series explored *resilience* on the individual, city, and policy levels. The Seminar Series speaker for November 2019 was Dr. George Bonanno, professor of clinical psychology at Columbia University Teachers College. Dr. Bonanno's recent empirical and theoretical work has focused on defining and documenting adult resilience in the face of loss or potential traumatic events, and on identifying the range of psychological and contextual variables that predict both psychopathological and resilient outcomes.

In his talk, entitled "Resilience to Loss and Trauma: What is it and why are we (usually, but not always) good at it?," Dr. Bonanno described his research demonstrating that responses to potentially traumatic events vary greatly and can be effectively captured by a small set of prototypical trajectories, including chronic post-traumatic stress disorder, recovery, and stable psychological health or resilience. His talk also reviewed predictors of these resilience trajectories and the concept of regulatory flexibility.

A list of all the *Resilience* Seminar Series events for 2019–2020 appears at the end of this report, and recordings of the seminars are available on the Center website.



Dr. George BonannoColumbia University
Teachers College

RESEARCH PROJECTS RELATED TO RESILIENCE

A Comparative Analysis of Resilient Phenotypes among Bereaved Youth

A 2019 awardee of the Center's Innovations in Positive Health grant, this research project is led by Drs. Christy A. Denckla, Karestan C. Koenen, and Henning Tiemeier (the Harvard Chan School); Ananda Amstadter (Virginia Commonwealth University); and Katie McLaughlin (Harvard University). The research addresses the knowledge gaps in the concept of resilience while identifying factors that promote positive health outcomes among bereaved youth.

This study will be among the first to examine the trajectories of response to parental bereavement among youth using prospective data, and the first to compare methods of assessing resilience in the same data. By improving our understanding of factors associated with resilience, we may be able to identify individuals at greatest risk for not achieving resilience and who may therefore gain significant benefit from targeted intervention and/or prevention strategies.



RESEARCH PROJECTS RELATED TO RESILIENCE

Dissertation Research Award Project: Psychological Resilience from Early Adversity and Cardiometabolic Health

Dr. Kristen Nishimi received a 2019–2020 Dissertation Research Award for her investigation of the relationship between psychological resilience from early-life adversity and cardiometabolic outcomes. Her research included a focus on the two primary pathways through which psychological resilience may impact cardiometabolic disease (i.e., biological functioning and health behaviors).

Dr. Nishimi shared an update on her research progress with the Harvard Chan School in February 2020. Her presentation provided an opportunity not only to share findings of her research with Center affiliates, but also to receive feedback and comments to help strengthen her work. Dr. Nishimi's research finds that psychological resilience from adversity may promote cardiometabolic health, potentially in part through more restorative/less deteriorative lifestyle practices. Ultimately, this research suggests that the process of resilience is not only a desirable outcome in itself, but also may be an important factor in promoting cardiometabolic health across the life course.



Kristen Nishimi, PhD '20 Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health



Kristen Nishimi presenting her research findings to Center affiliates, 2020 Photo credit: Jaime Mchunu

WORKPLACE WELL-BEING

Over the past several decades, the nature of work and the expectations of employees have changed significantly. These changes have been driven by advances in technology, globalization, the reorganization of industries, and shifts in consumer habits. Through these developments, individuals have also experienced changes in well-being as it relates to the workplace and to their lives outside of work. Work-life balance has become a topic of widespread concern, with employees seeking ways to be successful both at work and at home in a world in which it has become more difficult to keep the spheres separate.

Over the past year, the Center has sought to explore how workplace well-being interacts with overall mental health, as well as with physical health outcomes. Our research has examined the ways in which well-being impacts the workforce and how interventions and workplace programming can improve well-being outcomes.

RESEARCH PROJECTS RELATED TO WORKPLACE WELL-BEING

Development and Validation of a Measure of Work-Related Well-Being in the U.S. Workforce

The average U.S. adult worker spends about one-third of his or her working life at a workplace. Thus, work-related well-being is of importance to many stakeholders, including workers, organizations, and public policymakers, and is also an important concept for researchers to study. Yet, there are no well-constructed measures of work-related well-being that focus on how work and working conditions enable workers to be healthy and satisfied at work, to flourish at work, and to achieve a fulfilling work life. The overall purpose of this project, which was awarded funding from the Center's Innovations in Positive Health grant in 2019, is to develop a reliable and valid measure of work-related well-being, with the goal of developing a concise, comprehensive self-report measure suitable for diverse working populations.

Led by Drs. Susan E. Peters, Gregory R. Wagner, and Glorian Sorensen of the Harvard Chan School, the Development and Validation of a Measure of Work-Related Well-Being in the U.S. Workforce project focuses on the connections between workplace characteristics and working conditions that contribute to positive psychological well-being.

This study opens a new area of inquiry and will inform development of the scale, which can then be used in practice and for research purposes. Ultimately, the findings from this project will yield a reliable and valid measure of work-related well-being. The grant awardees plan to use this scale as a primary outcome measure in various projects when applying for future funding, as well as disseminating it for use by others.



Dr. Susan E. PetersResearch Fellow, Harvard T.H. Chan
School of Public Health



Dr. Gregory R. WagnerAdjunct Professor of Environmental
Health, Harvard T.H. Chan School of
Public Health



Dr. Glorian SorensenProfessor of Social and Behavioral
Sciences, Harvard T.H. Chan School
of Public Health

RESEARCH PROJECTS RELATED TO WORKPLACE WELL-BEING

Workplace Redesign for Worker Well-Being: Blueprint for Resilience

Together with the Harvard Center for Population and Development Studies, Dr. Laura Kubzansky is co-Pl on research that aims to improve health and well-being for low- and moderate-wage earners by focusing on workplace conditions instead of on workers. The research team is conducting a systematic review of interventions that appear to improve worker well-being by changing structures in the workplace (e.g., more flexible schedules), and conducting secondary analyses using existing data to test hypotheses about specific organizational-level factors that can be modified to improve worker well-being. The research will also produce a "state-of-the-state" article on what we know and where research and policy should go.



Dr. Laura KubzanskyLee Kum Kee Professor of Social and
Behavioral Sciences

Recently, Dr. Kubzansky and the research team presented their work at the Massachusetts Health & Hospital Association (MHA) "Caring for the Caregiver Task Force" meeting, which focused on employee well-being. The task force consists of diverse stakeholders from government, community, academic, and private-sector organizations, with a goal of building consensus recommendations to improve the lives of health care workers. The group was very receptive to a workplace redesign approach. As a result of this meeting, the research team is exploring a partnership with the MHA SHARE union and management team (a labor—management partnership) to help them evaluate an employee-led workplace intervention that they are implementing.



Center launch symposium, 2016 Photo credit (both): Sarah Sholes

C-Suite Leaders and Well-being

Historically, the role of business in health was limited to a focus on occupational safety to reduce absenteeism and increase presenteeism, and more recently, on prevention through "wellness" programs. There is, however, a budding movement toward redefining health closer to the World Health Organization's (1946) definition, with interest not just in avoiding disease but in promoting well-being in all dimensions-physical, social, and mental, and for a variety of stakeholders, including employees, consumers, community, and the physical environment. One project, led by Center Co-Director Dr. Vish Viswanath, in collaboration with Scientific Advisory Board Member Dr. Howard Koh, and Affiliate Scientist Dr. Shoba Ramanadhan, focused on the role of business leadership-how C-suite leaders of a company define health along the continuum of illness to well-being. The goal of this work is to move stakeholders from a deficit-based perspective to a more positive health perspective. To this end, investigators have asked research participants the following questions: 1) What practices and strategies do they use to promote health across various stakeholders, including employees, consumers, environment, and communities? 2) What motivations, challenges, and facilitators influence the actions of the C-suite leaders?

Investigators have conducted in-depth, hour-long conversations with 17 C-suite leaders and five system-level leaders who run networks of CEOs engaged in workplace health, such as cardiovascular disease or cancer. To canvass a broad range of opinions, the leaders involved in these conversations represented both small firms with fewer than 100 employees and large multinational corporations from a variety of sectors, including services, consumer, and manufacturing.

Selected findings from C-Suite Leadership and Well-being Study

- A range of factors is associated with successfully changing leaders' focus from illness and wellness to well-being, including:
 - expectations of the employees and consumer demand, especially from millennials
 - the realization that the broader notion of well-being is connected to employee performance and productivity
 - the goal of building goodwill in the community
 - · the evolving core values of the company.
- Corporations are already engaged in many activities that focus on "upstream" factors—such as education, voluntarism, and community improvement—that affect well-being, but they have not necessarily framed these activities as oriented toward well-being per se.
- C-suite leaders look to each other for models of how to promote well-being across the pillars of community, consumers, environment, and employees.

FUTURE

DIRECTIONS

This past year has been one of substantial growth for the Lee Kum Sheung Center for Health and Happiness. We have strengthened our capacity to lead and support important research and programming by increasing our research personnel and affiliate scientists. The Center has also developed exciting new programming, including its first summer short course, which explores the linkages between mental well-being and physical health outcomes. In looking ahead, we note that we are in the process of developing a summer internship program, designed to build the field by expanding the pipeline of scholars who can conduct relevant research. This internship program is designed to give undergraduate and graduate students the opportunity to work on research projects with Center researchers and affiliate scientists. And we are continuing to strengthen our relationships with key partners and centers at Harvard, including the GlobalMentalHealth@Harvard Initiative, the Human Flourishing Program at Harvard, and the Harvard Center for Population and Development Studies.

Over the coming year, we will continue to promote a mindset shift in science from deficit-based thinking to prioritizing well-being in a broader sense, with a focus on health assets and resources. By fostering this shift, the Center hopes to help build greater well-being globally for all. Specifically, we aim to:

- offer additional open-access resources online so that we are able to reach a more global audience
- support the next generation of academics and policymakers in the fields of positive health and translation and communication sciences
- further explore the impact of technology and social media on mental well-being and physical health outcomes
- seek opportunities for partnering and collaboration with other universities and research centers, and further capitalize on existing relationships
- continue to advance the translation of research completed at and supported by the
 Center into the implementation of policies and practices that advance mental well-being.

CENTER

GOVERNANCE

The Center's Scientific Advisory Board provides guidance on critical Center activities, goals, research priorities, and programming. Members of the board convene annually, with ongoing communication throughout the year, to evaluate Center's impact and to suggest areas of investment for the Center, such as recruitment, research funding, and future collaborations.



Jo Ivey Boufford, MD

Clinical Professor of Global Health, New York University School of Global Public Health

Jo Ivey Boufford is president emeritus of the New York Academy of Medicine and immediate past president of the International Society for Urban Health; professor emeritus of public service, health policy, and management at the Robert F. Wagner Graduate School of Public Service; and clinical professor of pediatrics at NYU Grossman School of Medicine. Previously, she served as co-director of the National Program Office of the Robert Wood Johnson Foundation Health and Society Scholars Program and as dean of the Robert F. Wagner Graduate School of Public Service at New York University. She also served in leadership positions with the World Health Organization, U.S. Department of Health and Human Services, New York City Health and Hospitals Corporation, and New York State Public Health and Health Planning Council, among others. Dr. Boufford was elected to membership in the Institute of Medicine (now the National Academy of Medicine) in 1992 and as a fellow of the National Academy of Public Administration in 2005. She has received numerous honorary doctorate of science degrees.



Richard J. Davidson, PhD

William James and Vilas Research Professor of Psychology and Psychiatry and Founder and Director, Center for Healthy Minds, University of Wisconsin–Madison

Richard J. Davidson's research is broadly focused on the neural bases of emotion and emotional style and methods to promote human flourishing, including meditation and related contemplative practices. His studies have included persons of all ages, from birth though old age, expert meditation practitioners, and individuals with disorders of emotion. He is the recipient of numerous research awards, including a National Institute of Mental Health (NIMH) Research Scientist Award, a MERIT Award from NIMH, an Established Investigator Award from the National Alliance for Research on Schizophrenia and Depression (NARSAD), a Distinguished Investigator Award from NARSAD, the William James Fellow Award from the Association for Psychological Science, and the Hilldale Award from the University of Wisconsin–Madison. In 2000, he received the Distinguished Scientific Contribution Award, the most distinguished award for science given by the American Psychological Association. In 2006, he was named one of the 100 most influential people in the world by TIME magazine. He is also founding co-editor of the American Psychological Association journal EMOTION and is past president of the Society for Research in Psychopathology and of the Society for Psychophysiological Research.



Steven Gortmaker, PhD

Professor of the Practice of Health Sociology, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health

Steven Gortmaker's research is focused on the health of children and adolescents, particularly households living in poverty and minority populations. The major goal of this research has been to identify modifiable risks for morbidity and mortality in the young, and to both initiate and evaluate interventions to improve these outcomes. He has focused on a broad variety of risks, ranging from income poverty, social stress, and social networks to behaviors such as smoking, physical activity, television and other screen time, and diet. His interventions include national and state policy, and programs at the regional, county, school, hospital, clinic, and individual levels. Professor Gortmaker directs the School's Prevention Research Center, funded by the Centers for Disease Control and Prevention. Its mission is to work with community partners to design, implement, and evaluate programs that improve nutrition and physical activity, while reducing obesity and chronic disease risk among children and youth. Professor Gortmaker also leads the Childhood Obesity Intervention Cost-Effectiveness Study (CHOICES) project, focused on producing recommendations for cost-effective childhood obesity intervention strategies for local, state, and national governments; businesses; communities; and schools.



Tara Gruenewald, PhD

Associate Professor and Chair, Department of Psychology, Crean College of Health and Behavioral Sciences, Chapman University

Tara Gruenewald is a social and health psychologist with additional training in public health and gerontology. Dr. Gruenewald's research focuses on the social and psychological factors that shape cognitive and physical functioning, physiology, and mental and physical health across the life course. Current foci include: (1) identification of the psychological, social, behavioral, and biological pathways which underlie socioeconomic gradients in functioning and health; (2) the role of perceptions of generativity in shaping health and functioning in later life; and (3) examination of health correlates of generative activity and intergenerational civic activity engagement. Her research utilizes a wide array of designs, including longitudinal cohort studies, experience sampling investigations, and experiments in the lab and in natural environments, as well as diverse data collection methods.



Howard K. Koh, MD, MPH

Harvey V. Fineberg Professor of the Practice of Public Health Leadership, Harvard T.H. Chan School of Public Health and Harvard Kennedy School; Co-Chair, Harvard Advanced Leadership Initiative

Howard K. Koh advances leadership education and training at schools across Harvard University. As commissioner of public health for the Commonwealth of Massachusetts from 1997 to 2003, Dr. Koh led the Massachusetts Department of Public Health, which included a wide range of health services, four hospitals, and a staff of more than 3,000 professionals. In this capacity, he emphasized the power of prevention and strengthened the state's commitment to eliminating health disparities. From 2009 to 2014, Dr. Koh served as the 14th Assistant Secretary for Health in the U.S. Department of Health and Human Services, after being nominated by President Barack Obama and being confirmed by the U.S. Senate. He also led interdisciplinary implementation of Healthy People 2020 and the National HIV/AIDS Strategy, as well as initiatives in a multitude of other areas.



Rosalind W. Picard, ScD

Professor of Media Arts and Sciences and Founder and Director, Affective Computing Research Group, MIT Media Lab

Rosalind W. Picard invents technologies that help people better understand the emotions and behaviors that impact human health and well-being. She is the author of the book *Affective Computing*, which outlines how to give machines the skills of emotional intelligence and is credited for launching the growing field of affective computing. Named one of seven "Tech Superheroes to Watch" by CNN, Professor Picard co-founded two companies, Empatica and Affectiva, which commercialized technologies invented by her team at MIT. She teaches MIT classes and directs a research group at the MIT Media Lab in Cambridge; leads a campus-wide well-being initiative as MIT's faculty chair for MindHandHeart; and serves as chief scientist for Empatica, creating Al-based analytics and wearables to improve human health and well-being. Professor Picard has received numerous honors and awards, including election to the National Academy of Engineering for contributions to wearable and affective computing.



Suzanne Segerstrom, PhD

Professor of Psychology, University of Kentucky

Suzanne Segerstrom's research primarily addresses the influence of individual differences in personality, cognition, and emotion on psychological health and physiological functions. She is particularly interested in understanding how aspects of self-regulation, including personality, behavior, and executive cognitive function, affect well-being and health. Professor Segerstrom has worked on the questions of how personality factors (e.g., optimism) affect the way that people approach and pursue their goals, what the costs and benefits of goal pursuit are, and especially how acts of self-regulation affect cardiovascular, neuroendocrine, metabolic, and immune functions. She currently has several active studies funded by the National Institutes of Health (NIH). One study examines the health consequences of motivation and goal pursuit in older women in a longitudinal "burst" design. Another is a longitudinal study of the effects of self-regulation and especially selfregulatory capacity on psychological and physical health and physiology in older adults. In addition to funding from the NIH, Professor Segerstrom's work has also been funded by the Norman Cousins Program and the Dana Foundation. She has also been awarded the prestigious Templeton Positive Psychology Prize, in recognition of her work on optimism. Professor Segerstrom is a past president of the American Psychosomatic Society.



Andrew Steptoe, PhD

British Heart Foundation Professor of Psychology, Behavioural Science and Health, University College London

Andrew Steptoe is director of the Institute of Epidemiology and Health Care in the Faculty of Population Health Sciences, and British Heart Foundation Professor of Psychology, Behavioural Science and Health, at University College London (UCL). He was appointed to UCL in 2000, became deputy head of the Department of Epidemiology and Public Health in 2005 and subsequently head of department, and was appointed director of the Institute in 2011. Professor Steptoe is a past president of the International Society of Behavioral Medicine and is a fellow of the Academy of Medical Sciences, British Psychological Society, Academia Europaea, and Academy of Social Sciences. He was founding editor of the *British Journal of Health Psychology;* an associate editor at numerous journals, including the *Annals of Behavioral Medicine* and the *British Journal of Clinical Psychology,* among others; and is on the editorial boards of seven other journals. Professor Steptoe directs the Psychobiology Group and the English Longitudinal Study of Ageing research group at UCL.

CENTER FACULTY, STAFF, AND AFFILIATE SCIENTISTS

FACULTY

The generous gift from the Lee Kum Kee family that created the Center for Health and Happiness also established two professorships within the Department of Social and Behavioral Sciences at the Harvard Chan School. Endowed professorships have been a Harvard tradition for nearly 300 years, and are the highest honor bestowed upon current faculty members at the University. These professorships establish a permanent legacy and are an essential means of attracting and retaining faculty talent.

Throughout the past three years, the Center for Health and Happiness has continued to expand its capacity by further developing its human capital. In 2018 and 2019, the Center welcomed a new Center administrator and created new positions for two Center research scientists, a staff assistant, and a research assistant. In addition, the team of researchers working on Center-related projects has expanded, with three active postdoctoral fellows and numerous project-based research assistants.



Laura Kubzansky, PhD, MPH

Lee Kum Kee Professor of Social and Behavioral Science and Co-Director, Lee Kum Sheung Center for Health and Happiness, Harvard T.H. Chan School of Public Health

In addition to her roles at the Center, Laura Kubzansky is director of the Society and Health Laboratory at the Harvard Chan School and serves as co-director of the JPB Environmental Health Fellows Program. Professor Kubzansky has published extensively on the role of psychological and social factors in health, with a focus on stress and positive psychological assets in relation to cardiovascular disease. She also conducts research on whether stress, emotion, and other psychological factors help to explain the relationship between social status and health. Other research projects and interests include: (a) biological mechanisms linking emotions, social relationships, and health; (b) relationships among early childhood environments, resilience, and healthy aging; and (c) how psychosocial stress or assets may interact with toxic environmental exposures (e.g., lead, air pollution) to influence health.

Professor Kubzansky has worked with numerous graduate students and postdoctoral fellows as a mentor, academic advisor, and dissertation committee member. She is a fellow in the American Psychological Association and the Academy of Behavioral Medicine Research. Professor Kubzansky has served as senior advisor to the Robert Wood Johnson Foundation—funded Positive Health Research program, as a member of the Centers for Disease Control and Prevention Healthy People 2020 Health-Related Quality of Life and Well-Being Workgroup, and as a member of the American Heart Association Science of Well-Being Expert Panel. She is a principal investigator or co-investigator on a wide variety of grants funded through the Veterans Administration, Robert Wood Johnson Foundation, Environmental Protection Agency, and National Institutes of Health, among others.



Kasisomayajula "Vish" Viswanath, PhD

Lee Kum Kee Professor of Health Communication and Co-Director, Lee Kum Sheung Center for Health and Happiness, Harvard T.H. Chan School of Public Health

In addition to his roles at the Center, K. "Vish" Viswanath holds a joint appointment at the McGraw/Patterson Center for Population Sciences at the Dana-Farber Cancer Institute and is the director of the Center for Translational Health Communication Science at the Harvard Chan School and Dana-Farber Cancer Institute (DFCI). He is also the faculty director of the Health Communication Core of the Dana-Farber/ Harvard Cancer Center (DF/HCC); director of the Harvard Chan India Research Center, Mumbai, India; and founding director of DF/HCC's Enhancing Communications for Health Outcomes (ECHO) Laboratory. Professor Viswanath's work, drawing from literature in communication science, social epidemiology, and social and health behavior sciences, focuses on translational communication science to influence public health policy and practice. His primary research is in documenting the relationship among communication inequalities, poverty and health disparities, and knowledge translation to address health disparities. He has published extensively on communication inequalities and health disparities, knowledge translation, public health communication campaigns, e-health and digital divide, public health preparedness, and the delivery of health communication interventions to underserved populations.

In recognition of his academic and professional achievements, Professor Viswanath has received several awards, including the Postdoctoral Mentor of the Year Award from the DFCI; the Joseph W. Cullen Memorial Award for Excellence in Tobacco Research, American Society of Preventive Oncology; the Dale E. Brashers Distinguished Mentor Award, National Communication Association; the Outstanding Health Communication Scholar Award, jointly given out by the International Communication Association and the National Communication Association; the J. Mayhew Derryberry Award from the American Public Health Association for his contribution to health education research and theory; and the CLA Alumni of Notable Achievement Award from the University of Minnesota. He delivered the 23rd Annual B. Aubrey Fisher Memorial Lecture at the University of Utah in 2009 and was elected a fellow of the International Communication Association (2011), Society for Behavioral Medicine (2008), and Midwest Association for Public Opinion Research (2006). He has served on numerous committees for the National Academies of Science and is currently, a member of its Standing Committee on Advancing Science Communication Research and Practice.

RESEARCH STAFF



Mesfin Bekalu, PhD

Research Scientist

Mesfin Bekalu's research interests are centered on health communication, with a specific focus on investigating the intended and unintended effects of media and messages on health-related attitudes, beliefs, and behaviors. This research involves studying the effects of campaign materials designed and produced for strategic communication purposes and delivered through different media (print, broadcast, and the internet), as well as the unintended harmful and/or beneficial effects of media and messages on health-related outcomes in secular communication contexts. Dr. Bekalu earned a PhD in social sciences from the University of Leuven in Belgium.



Ruijia Chen

Head Research Assistant

Ruijia Chen has worked as head research assistant since 2017, and is an ScD candidate in the Department of Social and Behavioral Sciences at the Harvard Chan School. She is particularly interested in experimental research on positive psychological well-being and health.



Eric Coles

Research Assistant

Eric Coles served as a Peace Corps volunteer in Morocco and a policy analyst at the National Institutes of Health and is currently researching happiness and well-being policies. He is a 2020–2021 recipient of the Center's Dissertation Research Award. Dr. Coles earned a DrPH degree from the Harvard Chan School.



Anne-Josée Guimond, PhD

Postdoctoral Research Fellow

Anne-Josée Guimond is a licensed psychologist in Québec, Canada, with an expertise in health psychology, anxiety, mood, and sleep disorders. Her research aims to understand how psychological well-being contributes to the prevention of cardiometabolic diseases and the maintenance of optimal physical health through modifiable biological and behavioral factors. Dr. Guimond received a PhD in clinical psychology from Université Laval (Canada), where she focused on the role of emotion regulation in psychological adjustment to breast cancer. She also earned an MA in public communication from Université Laval.



Harold Lee, PhD

Postdoctoral Research Fellow

Harold Lee's research focuses on the interplay between the biological and social determinants of health. He joined the Center in July 2019, where he works on a funded grant examining the relationship between optimism and exceptional longevity. Dr. Lee earned an MS in exercise physiology from the University of Connecticut, a master of applied positive psychology from the University of Pennsylvania, and a PhD in behavioral and social health sciences from Brown University.



Rachel Faulkenberry McCloud, ScD, MPH

Research Scientist, Dana-Farber Cancer Institute

Rachel Faulkenberry McCloud's research focuses on the impact of smartphones and other devices in data gathering and disease prevention. She is studying how connectivity and technology issues impact the ability of individuals from lower socioeconomic backgrounds to use their smartphones for internet access and public health research. Dr. McCloud received her ScD in social and behavioral sciences from the Harvard Chan School, where she focused on health communication in community-based settings. She earned an MPH in behavioral science and health education from the Emory University Rollins School of Public Health.



Farah Qureshi, ScD

Postdoctoral Research Fellow

Farah Qureshi received an inaugural Lee Kum Sheung Dissertation Research Award in the 2017–2018 academic year. Her research with the Center will contribute to a growing body of work exploring the interplay among social environments, children's emotional functioning, and cardiometabolic risk, and the ways in which positive assets may buffer children against poor health over the life course. Dr. Qureshi earned an MHS in child health and development from the Johns Hopkins Bloomberg School of Public Health, and an ScD in social and behavioral sciences from the Harvard Chan School.



Claudia Trudel-Fitzgerald, PhD

Research Scientist

Claudia Trudel-Fitzgerald's research projects target the role of positive and negative emotions in the maintenance and decline of physical health as well as longevity. Her scientific efforts have been supported by grants from the Canadian government and Harvard and recognized by various awards, including from the American Psychosomatic Society and the International Positive Psychology Association. In her role as Center research scientist, she focuses on whether and how the capacity to adequately regulate emotions may foster greater psychological well-being and prevent the development of chronic diseases. Dr. Trudel-Fitzgerald has been highly involved in the Center since its inception. She has taken a lead role in the Measurement Project and the creation of an online repository of psychological well-being scales, which she oversees. She also co-leads the Measurement Working Group with Center Affiliate Scientist Professor Tyler VanderWeele, which is composed of faculty from across Harvard University. Dr. Trudel-Fitzgerald completed her PhD in clinical psychology at Université Laval in Quebec City, followed by three years of postdoctoral research training in social epidemiology at the Harvard Chan School.



Caitlyn Wilson

Research Assistant

Caitlyn Wilson joined the Center as a research assistant in January 2019. Her research interests include positive psychological well-being, with a focus on gratitude and optimism.

ADMINISTRATIVE STAFF



Melia Dunbar

Administrative Assistant

Melia Dunbar provides administrative support to the Lee Kum Kee Professor of Social and Behavioral Sciences and to the Center overall. She is responsible for supporting the Center's communications and outreach. Prior to joining the Center, she was a program assistant at the Harvard Graduate School of Education.



Jaime Mchunu, MA

Center Administrator

Jaime Mchunu oversees day-to-day operations and provides strategic and managerial support for the administrative, financial, and research activities of both the Center and the co-directors. Prior to joining Harvard in 2015, Ms. Mchunu worked for several years in international development in southern Africa. She holds an MA in international development from the University of KwaZulu-Natal in South Africa.



Alicia Nelson, MPH

Social and Digital Media Program Assistant

Alicia Nelson manages the Center's social media platforms and assists with other administrative tasks. In December 2019, she graduated with an MPH degree from the Department of Health Policy and Management at the Harvard Chan School.

AFFILIATE SCIENTISTS



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Director, PhD Program in Population Health Sciences

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Florence Sprague Norman and Laura Smart Norman Professor of Public Health and Chair, Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health



Gloria Yeh, MD

Director of Mind-Body Research, Division of General Medicine and Primary Care, Beth Israel Deaconess Medical Center
Associate Professor of Medicine, Harvard Medical School

SELECTED PUBLICATIONS, PRESENTATIONS, AND AWARDS

Selected Peer-Reviewed Publications and Book Chapters

*Those listed in bold are Center scholars and affiliates.

Amano, H., Fukuda, Y., & **Kawachi, I.** (in press). Is higher work engagement associated with healthy behaviors? A longitudinal study. *Journal of Occupational and Environmental Medicine*. *62*(3), e87-e93.

Arrossi, S., Paolino, M., Orellana, L., Thouyaret, L., Kohler, R. E., & **Viswanath, K.** (2019). Mixed-methods approach to evaluate an mHealth intervention to increase adherence to triage of human papillomavirus-positive women who have performed self-collection (the ATICA study): Study protocol for a hybrid type I cluster randomized effectiveness-implementation trial. *Trials.* 20(1), 1-12.

Barbui, C., Purgato, M., Abdulmalik, J., Acarturk, C., Eaton, J., Gastaldon, C., ... **Patel, V.,** & Thornicroft, G. (2020). Efficacy of psychosocial interventions for mental health outcomes in low-income and middle-income countries: an umbrella review. *Lancet Psychiatry.* 7(2), 162-172.

Bekalu, M. A., McCloud, R. F., & **Viswanath, K.** (2019). Association of social media use with social well-being, positive mental health, and self-rated health: disentangling routine use from emotional connection to use. *Health Education & Behavior.* 46(2_suppl), 69S-80S.

Bekalu, M. A., Ramanadhan, S., Bigman, C., Nagler, R., & **Viswanath, K.** (2019). Graphic and arousing? Emotional and cognitive reactions to tobacco graphic health warnings and associated quit-related outcomes among low SEP population groups. *Health Communication*. *34*(7), 726-734.

Bowling, A., Blaine, R. E., Kaur, R., & **Davison, K. K.** (2019). Shaping healthy habits in children with neurodevelopmental and mental health disorders: Parent perceptions of barriers, facilitators and promising strategies. *International Journal of Behavioral Nutrition and Physical Activity.* 16(1), 1-10.

Brizuela, V., Bonet, M., Souza, J. P., Tunçalp, O., **Viswanath, K.**, & Langer, A. (2019). Factors influencing awareness of healthcare providers on maternal sepsis: A mixed-methods approach. *BMC Public Health*. *19*(1), 1-11.

- Brown, L., Karmakar, C., Flynn, M., Motin, M. A., Palaniswami, M., Celano, C. M., **Huffman, J. C.**, & Bryant, C. (2019). A Self-compassion group intervention for patients living with chronic medical illness: treatment development and feasibility study. *The Primary Care Companion for CNS Disorders.* 21(5).
- Brown, M. L., Ospina, J., **Celano, C., & Huffman, J. C.** (2019). The effects of positive psychological interventions on medical patients' anxiety: a meta-analysis. *Psychosomatic Medicine*. *81*(7), 595-602.
- Celano, C. M., Gianangelo, T. A., **Millstein, R. A.**, Chung, W. J., Wexler, D. J., **Park, E. R.**, & **Huffman, J. C.** (2019). A positive psychology—motivational interviewing intervention for patients with type 2 diabetes: Proof-of-concept trial. *The International Journal of Psychiatry in Medicine*. *54*(2), 97-114.
- **Chen, Y.**, Haines, J., Charlton, B. M., & **VanderWeele, T. J.** (2019). Positive parenting improves multiple aspects of health and well-being in young adulthood. *Nature Human Behavior.* 3, 684-691.
- Chen, Y., Kawachi, I., Berkman, L. F., Trudel-Fitzgerald, C., & Kubzansky, L. D. (2019). Does optimal parenting style help offspring maintain healthy weight into mid-life? *Preventive Medicine*. 123, 84-90.
- Chen, Y., Kim, E. S., Shields, A. E., & VanderWeele, T. J. (2020). Antecedents of purpose in life: Evidence from a lagged exposure-wide analysis. In P. L. Hill & A. L. Burrows (eds.) The ecology of purpose living across the lifespan: developmental, educational, and social perspectives. New York: Springer.
- Duque, L., Brown, L., Celano, C. M., Healy, B. C., & **Huffman, J. C.** (2019). Is it better to cultivate positive affect or optimism? Predicting improvements in medical adherence following a positive psychology intervention in patients with acute coronary syndrome. *General Hospital Psychiatry.* 61, 125-129.
- Gómez, M. A. L., Sparer-Fine, E., **Sorensen, G.**, & **Wagner, G.** (2019). Literature review of policy implications from findings of the center for work, health and well-being. *Journal of Occupational and Environmental Medicine*. *61*(11), 868-876.
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- Hayashi, H., Tan, A. S. L., **Kawachi, I.**, Ishikawa, Y., Kondo, Katsunori, K., Kondo, N., Tsuboya, T., & **Viswanath, K.** (2019). Interpersonal diffusion of health information: Health information mavenism among people age 65 and over in Japan. *Health Communication*. 1-11.
- Hernandez, R., Daviglus, M. L., Martinez, L., Durazo-Arvizu, R. A., **Huffman, J. C.**, Ramirez, F., Tito, L., Moskowitz, J. T. (2019). "iAlegrate!"—A culturally adapted positive psychological intervention for Hispanics/Latinos with hypertension: Rationale, design, and methods. *Contemporary Clinical Trials Communications*. *14*, 100348.

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- **Huffman, J. C., Millstein, R. A.**, Celano, C. M., Healy, B. C., Park, E. R., & Collins, L. M. (2019). Developing a psychological-behavioral intervention in cardiac patients using the multiphase optimization strategy: Lessons learned from the field. *Annals of Behavioral Medicine*, kaz035.
- **Huffman, J. C.**, Smith, D. M., Ibrahim, N. E., Duque, L., Moskowitz, J. T., & Celano, C. M. (2019). Using mHealth interventions to promote cardiovascular health. *Acta Cardiologica*. *74*(4), 283-285.
- James, P., Kim, E. S., Kubzansky, L. D., Zevon, E., Trudel-Fitzgerald, C., & Grodstein, F. (2019). Optimism and healthy aging in women. *American Journal of Preventive Medicine*. 56, 116-124.
- Kang, Y., Strecher, V. J., **Kim, E. S.**, & Falk, E. B. (2019). Purpose in life and conflict-related neural responses during health decision making. *Health Psychology.* 38, 545-552.
- **Kim, E. S.**, Delaney, S. W., & **Kubzansky, L. D.** (2019). Sense of purpose in life and cardiovascular disease: Underlying mechanisms and future directions. *Current Cardiology Reports*, *21*(11).
- Kim, E. S., James, P., Kubzansky, L. D., Zevon, E., Trudel-Fitzgerald, C., & Grodstein, F. (2019). Optimism and healthy aging in women and men. *American Journal of Epidemiology.* 188, 1084-1091.
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- Lee, H. Y., Oh, J., **Kawachi, I.,** Heo, J., Kim, S., Lee, J. K., & Kang, D. (2019). Positive and negative social support and depressive symptoms according to economic status among adults in Korea: Cross-sectional results from the Health Examinees-Gem Study. *BMJ Open, 9*(4), E023036.
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- Legler, S. R., Beale, E. E., Celano, C. M., Beach, S. R., Healy, B. C., & **Huffman, J.** C. (2019). State gratitude for one's life and health after an acute coronary syndrome: Prospective associations with physical activity, medical adherence and rehospitalizations. *The Journal of Positive Psychology.* 14(3), 283-291.

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Selected Presentations and Other Publications

Kim, E. S. (2020, March). Psychological well-being and physical health in the context of an aging society. *Department of Psychology, Seoul National University.* Seoul, South Korea. (Event postponed)

Kim, E. S. (2019, September). Purpose in life, work, and health in the context of an aging society. *National Academy of Sciences*. Washington, D.C.

Kim, E. S. (2019, May). Sense of purpose in life and physical health. *Berklee College of Music.* Boston, MA.

Kubzansky, L. D. (2019, November). State of the art in resilience research: Interdisciplinary perspectives and recommendations for best practices. *Invited panel, International Society for Traumatic Stress Studies*. Boston, MA.

Kubzansky, L. D. (2019, October). Childhood origins of cardiovascular disease: Trajectories of risk and resilience. *Invited seminar, Northwestern University.* Chicago, IL.

Kubzansky, L. D. & James, P. (2020, January). Does nature make children happy? The role of nature in child mental health and well-being. *Invited seminar, Child Mental Health Forum, Judge Baker Children's Center.* Boston, MA.

Trudel-Fitzgerald, C. (2019, August). Understanding the interplay between mental and physical health: A fascinating career! *National Student Leadership Conference*. Boston, MA.

Trudel-Fitzgerald, C., Zevon, E. & **Kubzansky, L. D.** (2019, November). Social integration and longevity. *RCCN workshop on Resilience and Reserve in Aging*. Austin, TX.

Viswanath, K. & **Coles, E.** (2019, December). Pursuing happiness and health: Defining, measuring, and translating wellbeing in policy and practice. Background Paper.

Center Seminar Series 2019-2020

SEPTEMBER 25, 2019

Anita Chandra (RAND Corporation).

Building Community Resilience: Grassroots and Grasstops.

OCTOBER 23, 2019

Willem Kuyken (University of Oxford Mindfulness Center).

Preventing Depression Across the Lifespan with Mindfulness-based Cognitive Therapy.

NOVEMBER 20, 2019

George Bonanno (Columbia University Teachers College).

Resilience to Loss and Trauma: What is it and why are we (usually, but not always) good at it?

JANUARY 22, 2020

Karmel Choi (Harvard T.H. Chan School of Public Health).

Psychological Resilience: What Can Genomic Approaches Teach Us?

FEBRUARY 26, 2020

Alonzo Plough (Robert Wood Johnson Foundation).

Moving From Disparities to Equity to Thriving: Operationalizing a Culture of Health.

APRIL 14, 2020

Michèle Lamont (Harvard University).

Event postponed.

APRIL 22, 2020

Sonja Lyubomirsky (University of California, Riverside).

Event postponed.



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