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# Harvard T.H. Chan School of Public Health Center for Work, Health, & Well-being

**A NIOSH *Total Worker Health*®  
Center of Excellence**

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## Annual Report Fiscal Year 2023



**HARVARD T.H. CHAN**  
SCHOOL OF PUBLIC HEALTH



**BOSTON COLLEGE**  
School of Social Work

**MIT**  
MANAGEMENT  
SLOAN SCHOOL

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## A Letter from our Co-Directors

The fiscal year of 2023 has been a year of both exciting scientific progress and internal leadership changes for the Harvard T.H. Chan School of Public Health Center for Work, Health, and Well-being. We are thrilled to share the work that we have been doing (pages 3-12) and to introduce our newly expanded leadership team (page 2).



In a post-pandemic world, the nature and meaning of work continues to evolve. In response, our Center has made deep investments in understanding the ways that both emerging and longstanding work experiences and exposures impact worker health, safety, and well-being. To do so, we are focusing substantial effort on collecting data for three of our research studies—the *Boston Hospital Workers Health Study* (pages 3-4), the *Fulfillment Center Intervention Study* (pages 5-6), and the *Thriving Workers, Thriving Workplaces Study* (pages 7-8). We have interacted with thousands of workers through intervention delivery, qualitative interviews, and quantitative surveys, learning crucial information about the ways that working conditions contribute to health, safety, and well-being across a range of sectors. These investments in data collection will contribute to both research and translational outputs for years to come. We have also established an approach for translating these findings into policies and programs for broader impact.

This year also brought major progress on our translational aims through our Outreach Core (pages 9-12). We are working directly with multiple organizations to support their implementation of a *Total Worker Health* approach, developed educational materials, and engaged with policy experts. These actions will help ensure that our research is being applied by those with direct power to make work better, safer, healthier, and more fulfilling for workers.

Please join us in celebrating these accomplishments and developments at our Center.

Glorian Sorensen, PhD

Erika Sabbath, ScD

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## SECTION I

# About Our Center

The mission of the Harvard T.H. Chan School of Public Health Center for Work, Health, & Well-being is to improve the safety, health, and well-being of workers through designing, testing, implementing, and disseminating effective and integrated workplace policies, programs and practices that foster a healthy work environment, reduce potential hazardous job exposures, and contribute to the safety, health, and well-being of workers. Our research illuminates the ways that work contributes to health and well-being, and applies that evidence-based knowledge to policy and practice recommendations.

Our Center is a multi-disciplinary, multi-institution collaboration across Greater Boston, with Project Leads based at Harvard, Boston College, and MIT. We also have longstanding collaborations with researchers and employers in Massachusetts and beyond, including Mass General Brigham, Boston University, HealthPartners of Minnesota, and a wide range of employers and stakeholder groups.

The Center's Research Core includes four research projects, three of which are currently underway:

- The **Boston Hospital Workers Health Study** is based on a long-standing partnership with Mass General Brigham, the largest private employer in Massachusetts, and aims to improve the health and well-being of the hospital workforce and reduce within-workforce disparities by identifying their root causes in the conditions of work.
- The **Fulfillment Center Intervention Study** is testing a participatory workplace intervention that introduces "Health and Well-being Committees" in multiple fulfillment centers in one company – to solicit workers' concerns regarding safety hazards and stressful work conditions, and implement action plans to address them, creating an innovative channel for worker input.
- The **Thriving Workers, Thriving Workplaces Study** seeks to understand the ways in which work – including working conditions and workplace practices and policies – shapes the extent to which workers thrive.
- In 2024, the **Older Workers' Health and Well-being Study** will begin, focusing on workers aged 50 and older through analysis of six waves of data from the U.S. Health and Retirement Study.

In addition to these research studies, the Center's **Outreach Core** develops and disseminates products, grounded in our research findings, to help organizations implement a *Total Worker Health* approach. The **Policy Working Group** helps define policy priorities, determine critical policy research questions, identify public and organizational policy implications of research findings, and craft policy guidelines. The work of the Center is further supported by an **Evaluation and Planning Core**, which provides overall leadership for the Center's administration and strategic planning.

### Major Scientific Accomplishments this Year

The Center's Year 2 accomplishments have contributed to its long-term impact, including the following achievements:

- We have focused on the completion of data collection from workers in two of the Center's studies, laying the foundation for expanded contributions to understanding of the role of working conditions in shaping worker safety, health, and well-being and in disparities in worker health outcomes.



- Qualitative interviews with low-wage workers in the *Boston Hospital Workers Health Study* illuminated the important roles that working conditions play in shaping these workers' health and well-being. Findings guided the development of our worker survey and will inform our approach to examining study results.
- Evaluation of the implementation of an intervention focusing on "Health and Well-being Committees" in fulfillment centers promises to provide a new model for organizational change, building on input from workers.
- The Center's validated Thriving from Work Questionnaire can be downloaded from the Center's website and has been translated into other languages. The research team has also established a method to measure group-level thriving from work. A Thriving from Work Questionnaire User Manual, including questionnaires and scoring recommendations, will soon be publicly available.
- Resources available on the Center's website have been downloaded by an ever-growing number of users, including over 600 new users benefiting from the Thriving from Work measure, the Workplace Integrated Safety and Health (WISH) Measure, and the Center's Implementation Guidelines.
- The Center has developed and disseminated new resources for employers to adopt a *Total Worker Health* approach, including a new asynchronous webinar, *Accelerate health outcomes at your organization with Total Worker Health*.<sup>®</sup>
- The Center has contributed to expanding education and training opportunities, including mentoring three international scholars and one post-doctoral fellow, as well as hosting educational events.
- The Center's Policy Working Group met twice, providing feedback and guidance to the three Center research studies currently underway – the *Boston Hospital Workers Health Study*, the *Fulfillment Center Intervention Study*, and the *Thriving Workers, Thriving Workplaces Study*.
- Center researchers presented at conferences, workshops, seminars, and webinars on topics pertaining to the Center's research studies and unifying themes around conditions of work, disparities, and mental health and well-being.

### Changes to Our Center's Leadership Team as of September 1, 2023

**Erika Sabbath** has taken on the role of Center Co-Director, partnering with **Glorian Sorensen** to share the leadership of the Center. As the Center's Founding Director, Dr. Sorensen has led the Center since 2007, and is now delighted to share its overall leadership with Dr. Sabbath. Dr. Sabbath, associate professor at the Boston College School of Social Work, is an accomplished social and occupational epidemiologist whose work explores the ways that working conditions, organizational policies and practices, and public policy changes impact the health and well-being of helping professionals. Since 2015, she has led the Center's flagship research project, the *Boston Hospital Workers Health Study*.

**Jack Dennerlein**, previously the Center's Associate Director, has been appointed Dean of the Boston University College of Health & Rehabilitation Sciences: Sargent College. Dr. Dennerlein has been part of the Center's leadership team since 2007, leading multiple research projects, including the Center's intervention research in the construction industry and in other settings, and most recently has led the Outreach Core. Dr. Dennerlein has stepped back from his leadership roles at the Center, now contributing to the Center's work as a Senior Advisor and Collaborator.

**Cal Halvorsen**, Project Lead for our *Older Workers' Health and Well-being Study*, is now the Center's Outreach Core Lead, and **Lisa Burke**, Assistant Director for the Center, is the Outreach Core Co-Lead. Dr. Halvorsen is an assistant professor at the Boston College School of Social Work, an affiliate of the Center on Aging & Work at Boston College, and a Senior Research Fellow at CoGenerate. He has extensive experience in developing and implementing dissemination and communication efforts, fostering productive relationships with community partners, and planning and authoring strategic communications for the lay public and advocacy groups. Ms. Burke has been an integral part of the Center's Outreach Core since joining the Center in 2017 and will expand her strategic planning and dissemination efforts in this new role.



## SECTION II

### The Research Core

#### **Boston Hospital Workers Health Study (2021-2026)**



*Erika Sabbath, Project Lead*

The *Boston Hospital Workers Health Study* has been the flagship project of the Harvard Center for Work, Health, and Well-being since the Center's inception in 2007. The study is a longstanding partnership between the Center and the employee health division at Mass General Brigham (MGB), the largest private employer in Massachusetts.

Our study utilizes administrative data on all patient care workers at two of the MGB hospitals—including payroll data, occupational health records, and healthcare utilization records—with surveys from a subset of these workers. With a cohort of over 25,000 patient care workers to date across two of MGB's academic medical centers, we are positioned to address a wide range of research questions about the relationship between working conditions and health in this important group of workers.

In the past, our research has focused on the health impacts of working conditions among clinical workers—nurses and nursing assistants. In the current project cycle, we are expanding the cohort from patient care workers to nearly all workers at the two hospitals, enabling us to evaluate occupational health profiles and hazards across a wide range of worker groups. Over the past year, we have started that process by expanding our study population to include low-wage service workers at the hospitals, including those working in patient transport, environmental services, and materials management.

#### **YEAR TWO ACCOMPLISHMENTS**

- *Qualitative interviews with low-wage workers.* We conducted over 30 qualitative interviews, in English and Spanish, with low-wage workers at the two hospitals to learn more about their jobs, their working conditions, and their health. Our research team spoke to patient care associates, workers in patient and materials transport, and environmental services employees. We learned that workers found a great deal of meaning in their work, and that this sense of purpose and contribution helped them through their hardest days. We also learned about the physical hazards of their jobs, the stressors they encountered, and the ways in which their work has impacted their health.



- *Worker survey launched.* Based on these interviews, we developed a comprehensive survey that we sent to these workers, in addition to nurses and nursing assistants, to enable us to analyze associations between a wide range of working conditions, health and well-being, and disparities in these relationships within and between occupational groups. After extensive survey development and testing, the survey was sent via email to more than 4,500 workers in June 2023. We have been in the hospitals almost weekly during the summer and fall of 2023 to build relationships with worker groups and help increase engagement with – and completion of – the survey.
- *Scientific manuscripts.* Our team of researchers and data analysts are already investigating a range of research questions, using data collected in prior cycles. Manuscripts in progress include analyses of how unfair treatment at work is associated with occupational injury; methods for measuring return to work after an occupational injury; how workers' and managers' reports of the work environment are associated with worker injuries; and how workers' experiences of vicarious trauma are associated with health claims for gastrointestinal illness.



## LOOKING AHEAD TO NEXT YEAR

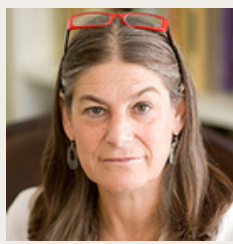
Once survey data collection and cleaning are complete, we will analyze data to learn more about work experiences and exposures of hospital employees—both those at bedsides and those supporting critical hospital operations—and how those exposures contribute to health and disparities within the hospital environment. We look forward to sharing our knowledge with leaders at Mass General Brigham to find ways to apply our research findings to the hospitals' policies, programs, and practices. We also look forward to sharing our findings with the broader research and practice communities.



## Fulfillment Center Intervention Study (2021-2025)



*Erin Kelly,  
Project Lead*



*Lisa Berkman,  
Project Co-Lead*

The *Fulfillment Center Intervention Study* leverages an established partnership with the e-commerce division of a national retail firm to implement and test a participatory workplace intervention that introduces “Health and Well-being Committees” (HaWCs). HaWCs solicit and prioritize workers’ concerns regarding safety hazards and stressful working conditions, and implement action plans to address them, creating a new channel for worker input into the conditions of work. This innovative, prevention-oriented strategy aligns with the *Total Worker Health* paradigm, focusing on warehouse workers who face a double burden of physically taxing and high-strain jobs that negatively impact mental and physical health, including injury-related disability.

The study team is engaged in a cluster-randomized trial to evaluate whether HaWCs impact worker health. We hypothesize the intervention will improve mental health and positive psychological well-being, reduce injuries, and encourage injury reporting. The primary outcome is psychological distress, a measure that captures many mental health problems. Because fulfillment center workers earn low wages and are disproportionately Black and Latino/a, our study aims to modify working conditions to promote the health of workers subject to systemic social inequities. Project activities include delivering the participatory intervention to randomized sites, collecting survey data 12-months post-baseline to evaluate the efficacy of this intervention, and collecting and analyzing process data to address implementation, adaptation, and sustainability. As a result, this study will advance understanding of potential effectiveness of this innovative participatory intervention and factors contributing to uptake of these *Total Worker Health* approaches.

### YEAR TWO ACCOMPLISHMENTS

The primary achievements during the second year of the study have been:

- completing our survey data collection at 6- and 12-months for the outcome evaluation;
- data management and preliminary analysis of survey data; and
- continuing maintenance of our participatory intervention and process data collection activities and preliminary analysis of process data.

Completing our survey data collection: Baseline survey data collection and 6- and 12-month survey data were collected for the first cluster of four sites (two treatment, two control) in year one of the grant. In year two, we have completed follow-up data collection at 6- and 12-months for the remaining 12 sites (six treatment, six control), thus finalizing the survey data collection portion of the study.



Hourly worker (i.e., non-management) survey completion rates for each wave are as follows:

Wave 1: 47.5% response rate (n=1446 completed)

Wave 2: 45.4% response rate (n=1452 completed)

Wave 3: 45.7% response rate (n=1460 completed)



*Conducting management and preliminary analysis of the survey data:* The team continues to clean, code, and conduct analyses of the baseline survey data. We are conducting preliminary analyses on intervention effects to share with our industry partner and in preparation for drafting our first paper on intervention results.

*Presentation of preliminary results:* The team has presented preliminary baseline findings on voice environment and its correlates in the warehouse at academic seminars at the Harvard Kennedy School and MIT Sloan School of Management, and at the Labor and Employment Relations Association and American Sociological Association conferences in summer 2023.

*Ongoing maintenance of the intervention and process data collection; preliminary analysis of process data:* All eight sites randomized to treatment launched HaWCs in the first year of the grant. Over the course of the second year, four HaWCs suspended operation for various reasons, and four continue to operate with the ongoing support of the Fulfillment Center Intervention Study researchers. The four operating HaWCs continue to implement multiple workplace action projects in key areas which include addressing workers' safety and health concerns, increasing training opportunities, and improving the workflow and cleanliness of buildings. Sites which terminated their HaWC programs cited several reasons, but most prominently the loss of a supervisor co-lead who was not replaced and the perception in some sites that the HaWC overlapped in function with pre-existing channels for associate voice (i.e., these sites host monthly roundtables in which associates can express concerns directly to upper management), and therefore was not viewed as resource effective. Study researchers have conducted exit interviews with HaWC members and building managers at these sites and are using this information to develop analyses regarding barriers to implementation and sustainability. Additionally, HaWC materials have been created to help train new co-leads for this role in order to facilitate a smoother transition after the loss of an experienced co-lead.

## **LOOKING AHEAD TO NEXT YEAR**

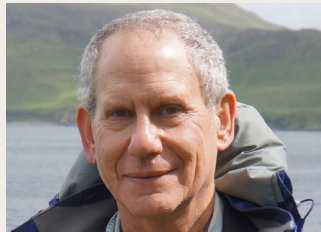
The *Fulfillment Center Intervention Study* continues to collect process data on existing sites including data from interviews with HaWC co-leads and building managers, observations of HaWC meetings, survey questions about HaWC awareness, and ethnographic field notes from site visits with all six treatment sites that completed a 12-month survey in the summer of 2023. Analysis of process data is also well underway with research team members writing analytic memos, tracking action projects and attendance over time in detail to calibrate implementation fidelity, and constructing a coding scheme in preparation for coding the qualitative data to understand how HaWCs vary in implementation and to identify sustainability challenges and strategies. We will submit our protocol paper to the journal *BMJ Open* in fall 2023.



## Thriving Workers Thriving Workplaces Study (2022-2026)



Susan Peters,  
Project Lead



Gregory Wagner,  
Project Co-Lead

*Thriving from Work refers to a state of positive mental, physical, and social functioning in which workers' experiences of work and working conditions enable them to thrive in their overall lives, contributing to their ability to achieve their full potential in their work, home, and community.*

**Thriving workers are engaged, productive, and contribute to the success of their organizations. A thriving workforce is the foundation for a thriving resilient organization and healthier communities.**



*“Workplaces can be engines of mental health and well-being.” Vivek Murthy, [U.S. Surgeon General’s Framework for Workplace Mental Health and Well-being](#).*

The *Thriving Workers, Thriving Workplaces Study* examines how working conditions and organizational policies, programs, and practices impact worker well-being, and develops resources for research and practice to build capacity in organizations to promote worker and organizational thriving. Over 160 million workers in the U.S. workforce spend more than half their waking hours at work; 81% of these workers are prioritizing their well-being when considering who they will work for (APA 2022 Work and Well-being Survey). The importance of worker well-being and the need for organizations to improve working conditions and their organizational policies, programs, and practices to foster a thriving workforce is more critical than ever, both for the health of our workers and for healthy organizations. The U.S. Surgeon General highlighted our Center’s [2022 Lancet publication](#) to emphasize the importance of work and working conditions when considering worker well-being.



## **YEAR TWO ACCOMPLISHMENTS**

In this first year of our study (second year of the Center's funding cycle), we have developed resources and tools for organizations to measure worker well-being and to use this measure as a framework for understanding the important dimensions of thriving from work needed to support worker well-being. We have also built the infrastructure for using this measure for our upcoming data analyses.

*Development of resources for research and practice:* The Thriving from Work Questionnaires (short and long forms) measure worker well-being based on our thriving from work conceptual framework developed by Center investigators. The Thriving from Work Questionnaires are now available in English, Spanish, Haitian Creole, and German. The Spanish and German validation studies have been completed. Using data from an affiliated study that surveyed nearly 9,000 finance workers across 300 offices, we have established a method to measure group-level thriving from work which will be used across our research studies and will also be made available for others to use.

We have developed a Thriving from Work Questionnaire User Manual that will soon be publicly available. The User Manual contains information on using the Thriving from Work Questionnaires and scoring recommendations; it will continue to be updated as our psychometric and methodological research using the Thriving from Work Questionnaire is completed.

Together with the Center's Outreach Core, we continue to provide technical assistance to organizations and other research groups using our questionnaires and resources. As a result, we have two affiliated projects currently underway extending our reach internationally: a project funded by the Chilean social security agency, Superintendencia de Seguridad Social, and another in Germany with Helmut Schmidt University. The Thriving from Work Questionnaires and a frequently asked questions document are available for downloading on the Center's website; the User Manual will soon be added.

## **LOOKING AHEAD TO NEXT YEAR**

Data collection from hospital workers and fulfillment center workers will be completed as part of the *Boston Hospital Workers Health Study* and the *Fulfillment Center Intervention Study*, respectively (see updates from these studies described previously). These data will be linked to administrative data from our partnering companies. Over the upcoming year we will analyze these data to answer research questions to help us better understand the importance of workers' thriving from their work. These research findings will contribute to the business case for worker well-being.

## Outreach Core (2021-2026)



*Jack Dennerlein,  
Previous Project Lead*



*Cal Halvorsen,  
Project Lead*



*Lisa Burke,  
Project Co-Lead*

The Outreach Core translates and disseminates evidence-based research findings, best practices and policy recommendations through multiple communication channels to support adoption of the *Total Worker Health* approach. The Center continues to expand its reach, with an increasing number of organizations benefiting from the Center's resources.

### YEAR TWO ACCOMPLISHMENTS

#### Tools and Resources on our Center Website

The Center's website (<https://centerforworkhealth.sph.harvard.edu/>) and social media activity aim to keep our community of researchers and practitioners informed about our studies and activities, as well as sharing information of interest from other sources. The website includes information about our research team, advisors, events, news, publications, case studies, and education opportunities. The resources available on our website include the following:

- The **Thriving from Work Questionnaires** provide a comprehensive measure of work-related well-being. A **frequently asked questions** document is also available for download, and a User Manual with information about scoring and interpreting results will soon be added (110 downloads since May 2023).
- The **Workplace Integrated Safety and Health (WISH) Assessment** measures workplace policies, programs, and practices that focus on working conditions and organizational facilitators of worker safety, health, and well-being. Available to the public since 2018, the WISH can be used by employers and researchers to assess the extent of implementation of a Total Worker Health approach. (300 downloads since October 2022).
- The Center's Implementation Guidelines, **Implementing an Integrated Approach: Weaving Worker Health, Safety, and Well-being into the Fabric of Your Organization**, has provided a comprehensive reference for practitioners and researchers seeking to implement a Total Worker Health approach to worker safety, health, and well-being since 2017 (225 downloads since October 2022).
- **Health and Safety Toolbox Talks** are based on the Center's All the Right Moves (ARM) project that was developed during the Center's previous funding cycle. These were developed for construction workers, providing a participatory method for companies to determine workers' experiences to drive change.

#### Social Media and Center Newsletter

Our Center has an active **X (formerly Twitter)** presence (@HSPHCenterWork) with 800 followers and 375 people/organizations being followed. The Center has increased our activity on **LinkedIn**, with more than 500 connections. In June 2023, we emailed our third **newsletter** to more than 3,400 people, sharing updates from the Center's research projects, details of upcoming events, and links to recent publications.



## In the News

Center research and researchers were highlighted in articles and Center Co-Director Glorian Sorensen was recognized with two awards.

- McKnights Long-Term Care News published “[Prioritizing staff members’ well-being shown to alleviate shortages: study](#)”, based on **findings from the Center’s [Workplace Integrated Safety and Health \(WISH\) Assessment](#)** used in the Center’s past study of nursing homes.
- **NIOSH Research Rounds** highlighted the *Thriving from Work Study* in May 2023, showcasing the *Thriving from Work Questionnaire: Dimensionality, Reliability, and Validity of the Long and Short Form Questionnaires* publication.
- **The Surgeon General’s Framework for Workplace Mental Health and Well-Being** was released in October 2022, highlighting the essential role that workplaces play in promoting and supporting the mental health and well-being of workers and communities. Center researchers from the *Fulfillment Center Study* were cited as advisors in creating the framework.
- Center Co-Director **Glorian Sorensen** was recognized by the *American Journal of Health Promotion (AJHP)* as **one of the most accomplished and influential women researchers and educators in the public health education and health promotion field**; and received the **Total Worker Health Founders Award** for her contributions to the field, presented at the 3rd International Symposium to Advance *Total Worker Health®*.

## Collaborations with TWH Affiliates

Center researchers collaborated with **HealthPartners** of Minnesota to develop a 90-minute interactive webinar, introducing the *Total Worker Health* approach to representatives of a range of nearly 40 employers. An earlier version of this webinar was delivered as a workshop by Jack Dennerlein and Nico Pronk at the **HERO Think Tank** in North Carolina in February 2023. This webinar, *Accelerate health outcomes at your organization with Total Worker Health®*, will soon be available to the public on our website, accompanied by a worksheet for participants to use in identifying working conditions to improve and action steps to take to implement workplace changes.

The Center collaborated with **SAIF** (State Accident Insurance Fund), Oregon’s not-for-project workers’ comp insurance company, to take key aspects of our Implementation Guidelines and streamline the information to create “*Worker Well-being in 5 Easy Steps*”, an online suite of *Total Worker Health* videos, tip sheets, and resources for SAIF consultants to use with their small- and medium-sized clients. Through an evaluation of this process, the Center seeks to understand facilitators and barriers to creating these types of resources, to inform similar future efforts. Our researchers are working with our SAIF colleagues to develop a case study and paper based on this collaboration.

## Policy Working Group

The Policy Working Group provides an important vehicle for ensuring that our research will inform policy. Convened twice this year, members include Center leadership and seven external policy experts, researchers, and practitioners. This year, the Policy Working Group provided guidance to the three Center research studies currently underway -- the *Boston Hospital Workers Health Study*, the *Fulfillment Center Intervention Study*, and the *Thriving Workers, Thriving Workplaces Study* – thereby contributing to planning for potential policy implications for our research.

## **Education and Training**

By **co-sponsoring seminars with the Harvard Education and Research Center (ERC)**, the Center expands the reach of its educational efforts. Audiences for these seminars include researchers, practitioners, occupational and environmental medicine residents, and master's and doctoral students.

- On December 5, 2022, **Dr. Daniel Schneider**, Professor of Social Policy at the Harvard Kennedy School and Professor of Sociology at Harvard College, presented on [The Shift Project](#), focused on how precarious and unpredictable work schedules affect household economic security and worker and family health and well-being. Attended by 49 people.
- On April 3, 2023, Director of NIOSH **Dr. John Howard** presented on Algorithms and the Future of Work, discussing the algorithms which are embedded in workplaces, and the risks related to the health, safety, and well-being of workers from algorithms operating in the work environment. Attended by 54 people.

**Ricardo Diego Suárez Rojas**, a doctoral candidate at the Boston College School of Social Work, has received a **Harvard ERC Pilot Project Grant** for his study, "Characterizing Experiences of Workplace Violence among Hospital Patient Care Employees", working with Dr. Erika Sabbath, Center Co-Director and Principal Investigator for the Center's *Boston Hospital Workers Health Study*. Data from that study will be used for this project.

The segment of the Harvard University MOOC (Massive Open Online Course) "**Improving Your Business Through a Culture of Health**," featuring Center Co-Director **Dr. Glorian Sorensen** and Harvard Business School Professor Robert Huckman, is available to the public through Harvard's online courses. More than 80,350 people have enrolled in this free course since 2018.

The Center also welcomed **three visiting scholars and one post-doctoral fellow, providing training and mentoring.**

- **Stephanie Neidlinger**, PhD student and Research Associate in work and organizational psychology at Helmut Schmidt University in Hamburg, Germany, working on a German validation of the Thriving from Work Questionnaire.
- **Emma Cedstrand**, a licensed psychologist and PhD student at the Institute of Environmental Medicine at the Karolinska Institute in Sweden, worked on the *Thriving Workers, Thriving Workplaces Study*.
- **Ann Sophie Lauterbach, M.Sc.**, a PhD student at the Graduate School for Behavioral and Social Sciences, Future of Work Lab, at the University of Konstanz in Germany, worked on the *Thriving Workers, Thriving Workplaces Study*.
- **Dr. Yaminette Diaz-Linhart, PhD, MPH, MSW**, a post-doctoral fellow at the MIT Sloan School of Management, is working on the *Fulfillment Center Intervention Study*. In March 2023, Yaminette presented to Center researchers on "The Role of Voice Environment in Warehouse Worker Well-Being", based on findings from the *Fulfillment Center Study*.



## LOOKING AHEAD TO NEXT YEAR

The Center has established a strong foundation for our ongoing outreach and dissemination. We look forward to building on this to extend our communication, implementation, policy, and education efforts through multiple products and activities, including the following:

- Continue our collaborative efforts with SAIF, meeting with them in person in October of 2023 to discuss learnings, potential future collaboration, and opportunities for developing additional *Total Worker Health* materials. A case study and paper based on this collaboration are underway.
- The *Thriving from Work Questionnaires User Manual* will soon be available on the Center's website, describing the conceptualization of Thriving from Work and the development of the Questionnaires.
- The Policy Working Group will continue to provide guidance to ongoing research projects, in addition to sharing insights regarding the *Older Workers' Health and Well-being Study* that is preparing to launch in September of 2024.
- A new asynchronous webinar, *Accelerate health outcomes at your organization with Total Worker Health®* will be available on our website, featuring Center Senior Advisor Jack Dennerlein and Joel Spoonheim of HealthPartners; a worksheet to walk participants through the action planning process will also be available for download.



## **Conference and Seminar/Webinar Presentations**

Sabbath E, Nielsen K, Cunningham C, Hammer L (October 13, 2022). Work Organization as a Core Dimension of Total Worker Health: Toward an Expert Consensus. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Sorensen G. on behalf of Peters SE (October 13, 2022). Development of the Thriving from Work Questionnaire: A Measure of Work-Related Well-being. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD. October 13, 2022.

Dennerlein J (October 13, 2022). Mental Health of Construction Workers. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Sorensen G, Dennerlein J, Lovejoy M, Peters SE, Nielsen K (October 14, 2022). Approaches and Challenges to Improving Conditions of Work across Industries. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Sorensen G, Pronk N, Jetha A, Sabbath E. on behalf of Peters SE (October 14, 2022). Protecting Workers in the Post-Pandemic World. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Williams JA (October 13, 2022). Using the Workplace Integrated Safety and Health Assessment. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Burke L (October 14, 2022). Accelerating Research to Practice: Connect with NIOSH Total Worker Health Centers. 3rd International Symposium to Advance Total Worker Health, Bethesda, MD.

Peters SE. (November 3, 2022) Thriving Workers, Thriving Workforces, Thriving Workplaces. Invited Speaker. Work Wellness Institute Conference: Breaking Down the Reality of Workplace Wellness. (Remote)

Dennerlein J (November 10, 2022). Linking MSDs to Total Worker Health® -- A Town Hall, National Safety Council, Virtual Town Hall Meeting. (Remote)

Dennerlein J (November 17, 2022). Strengths, Limits and Challenges: Total Worker Health, Work Environments Safe and Healthy, and the European Network for Health Promotion at Work – a Panel Discussion, Primer Congreso de Entornos Laborales Seguros y Saludables, Mexican Social Security Institute (IMSS), Monterrey, Mexico.

Dennerlein J (November 18, 2022). Global Perspectives of the Future of Occupational Health– a Panel Discussion, Primer Congreso de Entornos Laborales Seguros y Saludables, Mexican Social Security Institute (IMSS), Monterrey, Mexico.

Halvorsen C (November, 2022). Gig work and self-employment: Acknowledging emerging forms of precarious work in the informal economy. Presentation within the Sloan Research Network on Aging & Work pre-conference on Reimagining ‘Productive Aging’ for a Post-COVID World: Critical Reflections and New Directions, at the Gerontological Society of America Annual Scientific Meeting, Indianapolis, IN.

Dennerlein J (December 2, 2022). What’s Work got to do with it: Health Promotion at work and the Integrated Approach. Occupational Health Seminar, Pontifical Catholic University of Chile, Santiago. (Remote)

Sorensen G (February 22, 2023). Improving Worker Health through Organizational Changes. California Labor Lab Webinar Series, Berkeley, CA. (Remote)

Halvorsen C (March 8, 2023). A multidisciplinary assessment of the health, well-being, and experiences of Senior Community Service Employment Program participants: A Boston College pilot study. Presentation to the U.S. Department of Labor and its Senior Community Service Employment Program state and national grantees. (Remote)



**Conference and Seminar/Webinar Presentations, *continued***

Sorensen G (April 20, 2023). Implementing Individual and Leader Interventions in Organizations: EU H-WORK Approach. SIOP Annual Conference, Boston, MA.

Sabbath E (May 2023). The prevention paradox: Impact of a hospital-based safe patient handling intervention on injury rate disparities in hospital patient care workers. Seminar presented to Institute for Work and Health, Toronto, Canada. (Remote)

Peters S (May 22, 2023). Measures that Matter to Employers AND Employees, as part of session on Thriving Workers and Sustainable Workplaces. HERO Summer Think Tank. (Remote)

Diaz-Linhart Y, Kelly EL, Kowalski A, Kubzansky L (June 2023). The Role of Voice Environment in Warehouse Worker Well-Being. Labor and Employment Relations Association Annual Meeting, Detroit, MI.

Neidlinger SM, Felfe J, Peters SE (August 8, 2023). The effects of strength application and work location on work-related self-efficacy, work performance, work-life balance, and job strain: A diary study. Annual Meeting of the Academy of Management. Boston, MA.

Halvorsen C (September 2023). Interests and experiences of older workers: Evidence from multiple nationally representative studies. Presentation to the STEM60+ Workshop, organized by the University of Hawai'i at Mānoa. (Remote)



## **Publications from Center Projects and Affiliated Projects**

Peters SE, Wagner GR. Work During and After the Pandemic. In: The Social Epidemiology of the COVID -19 Pandemic. Editors: Duncan DT, Kawachi I, Morse SS. Oxford. In Press.

Stelson EA, Sabbath-Clayton LL, Sorensen G, Kubzansky LD, Berkman LF, Sabbath EL. Residential addiction treatment providers: Identifying the role of social context in worker health and turnover. Soc Sci Med 2022 Dec; 314:115462. <https://doi.org/10.1016/j.socscimed.2022.115462>

Halvorsen C, & Lai PHL. Documenting the health, well-being, and experiences of older workers in the Senior Community Service Employment Program: Topline results of SCSEP respondents in Massachusetts. Boston College School of Social Work. January 2023. [doi.org/10.2139/ssrn.4405049](https://doi.org/10.2139/ssrn.4405049)

Peters S. Workplace rehabilitation. In van Griensven H and Strong J. Pain: A textbook for health professionals. 2023.

Kim S, Halvorsen C, & Han S. Volunteering and changes in cardiovascular biomarkers: Longitudinal Evidence from the Health and Retirement Study. Innovation in Aging , 7 (5). 2023. <https://doi.org/10.1093/geroni/igad048>

Pronk NP. Work, the Workplace, and the Mental Health of Workers. ACSM's Health & Fitness Journal 27(3):p 50-52, 5/6 2023. doi: 10.1249/FIT.0000000000000859

Michaels D, Wagner GR, Ryan L. Lessons From COVID-19 for Protecting Workers in the Next Pandemic. JAMA. June 16, 2023;330(1):23-24. doi:10.1001/jama.2023.8229

Peters SE, Gundersen DA, Katz JN, Sorensen G, Wagner GR. Thriving from Work Questionnaire: dimensionality, reliability, and validity of the long and short form questionnaires. Am J Ind Med. 2023; 1- 16. doi:10.1002/ajim.23465

Williams J, Collins JE, Gandhi A, Yu H, Boden L, Katz J, Wagner G, Sorensen G, Can Better Leadership Reduce Nursing Home Staff Turnover?, Journal of the American Medical Directors Association, 2023, ISSN 1525-8610, <https://doi.org/10.1016/j.jamda.2023.05.021>.



## Senior Leadership, Other Investigators, Staff

### Center Leadership

**Glorian Sorensen, PhD, MPH** a,b,c,d  
Center Co-Director and Co-Principal Investigator  
Professor, Social and Behavioral Sciences,  
Harvard T.H. Chan School of Public Health

**Erika L. Sabbath, ScD** a,c,f  
Center Co-Director and Co-Principal Investigator  
Associate Professor, Boston College School of  
Social Work

**Lisa Berkman, PhD** a,d  
Director, Harvard Center for Population and  
Development Studies  
Thomas D. Cabot Professor of Public Policy,  
Epidemiology, and Global Health and Population,  
Harvard Chan School of Public Health

**Cal Halvorsen, PhD, MSW** a,b,c,f  
Assistant Professor, Boston College School of  
Social Work

**Erin L. Kelly, PhD** a,d  
Professor, Work and Organization Studies, MIT  
Sloan School of Management; Co-Director,  
Institute for Work and Employment Research

**Susan Peters, PhD, BOccThy(Hons)** a,b,c,e  
Research Scientist, Harvard T.H. Chan School of  
Public Health

**Gregory Wagner, MD** a,b,c,e  
Chair, Policy Working Group  
Adjunct Professor, Department of Environmental  
Health, Harvard T.H. Chan School of Public Health

### Other Investigators

**Les Boden, PhD** c  
Professor, Environmental Health, Boston  
University School of Public Health

**Matt Gregas, PhD** c  
Manager, Statistical Group, Boston College

**Daniel Gundersen, PhD** e  
Lead Scientist, Population Sciences, Dana-Farber  
Cancer Institute

**Dean Hashimoto, MD, JD** c  
Chief Medical Officer, Occupational Health  
Services, Mass General Brigham; Assoc  
Professor, Boston College Law School

**Karen Hopcia, ScD, ANP-BC, COHN-S,  
FAAOHN** c  
Associate Director of Shared Services, Budget and  
Data Analysis, Mass General Brigham  
Occupational Health Services

**Jeffrey Katz, MD** e  
Director, Orthopaedic and Arthritis Center for  
Outcomes Research; Professor of Medicine and  
Orthopedic Surgery, Brigham and Women's  
Hospital; Professor of Epidemiology and  
Environmental Health, Harvard Chan School of  
Public Health

**Laura Kubzansky, PhD** d  
Lee Kum Kee Professor of Social and Behavioral  
Sciences; Harvard Chan School of Public Health

**Meg Lovejoy, PhD** d  
Research Program Director of the Work and Well-  
being Initiative, Harvard Center for Population and  
Development Studies

**Melissa McTernan, PhD** c,f  
Research Statistician, Boston College

**Nico Pronk, PhD, FACSM, FAWHP** b  
President, HealthPartners Institute; Chief Science  
Officer, HealthPartners

**Hazhir Rahmandad, PhD** d  
Schussel Family Professor of Management Science;  
Associate Professor of System Dynamics  
MIT Sloan School of Management

**Molin Wang, PhD** d  
Associate Professor in the Departments of  
Epidemiology and Biostatistics, Harvard T.H. School  
of Public Health; Associate Professor, Channing  
Division of Network Medicine, Department of  
Medicine, Harvard Medical School and Brigham and  
Women's Hospital



## **Senior Advisor and Staff**

**Lisa Burke, MEd a,b**  
Center Assistant Director  
Director of Outreach  
Center for Work, Health, & Well-being  
Department of Social and Behavioral Sciences  
Harvard Chan School of Public Health

**Grace DeHorn, MSW d**  
Project Manager  
MIT Warehouse Work, Health and Well-being  
Project

**Jack Dennerlein, PhD**  
Senior Advisor and Collaborator  
Dean, Boston University College of Health and  
Rehabilitation Sciences: Sargent College  
Adjunct Professor, Department of Environmental  
Health, Harvard Chan School of Public Health

**Alicia Edwardson, MBA c**  
Project Manager  
Mass General Brigham Occupational Health  
Services

**Yixin Pan, MS c**  
Data Analyst  
Boston College Research Services

**James Ritchie-Dunham, PhD e**  
President, Institute for Strategic Clarity  
Department Associate, Department of  
Social and Behavioral Sciences  
Harvard T.H. Chan School of Public Health

**Lorraine Wallace, MPHb e**  
Associate Director  
Center for Community Based Research  
Dana-Farber Cancer Institute

**Maggie Woodlock a,b,c**  
Research Assistant  
Center for Work, Health, & Well-being  
Harvard Chan School of Public Health

**Max Yochum, MPA c**  
Systems Developer  
Mass General Brigham

**a = Evaluation and Planning Core**  
**b = Outreach Core**  
**c = Boston Hospital Workers Health Study**  
**d = Fulfillment Center Intervention Study**  
**e = Thriving Workers, Thriving Workplaces  
Study**  
**f = Older Workers' Health and Well-being  
Study**

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## External Advisory Board, 2021- 2026

Members of the External Advisory Board provide guidance on project implementation to maximize impact; identify key priorities for future research and education; and facilitate relationship building with key regional and national resources. The Center's External Advisory Board met in person and via zoom on October 18 2022, to share insights on the Center's ongoing research and outreach activities.

**Laura Barger, PhD**

Associate Physiologist, Brigham and Women's Hospital; Assistant Professor, Harvard Medical School

**Sharon Block, JD**

Executive Director, Labor and Worklife Program; Harvard Law School

**Letitia Davis, ScD, EdM**

Former Director, Occupational Health Surveillance Program; Massachusetts Department of Public Health

**Amy Edmondson, PhD**

Professor of Leadership and Management Harvard Business School

**Bradley Evanoff, MD, MPH**

Professor of Occupational & Environmental Medicine; Assistant Dean for Clinical & Translational Research; Washington University in St Louis School of Medicine; Associate Director, Healthier Workforce Center of the Midwest\*

**Walter Jones, MS, CIH**

President, waltjonesy&friends Consulting  
Former Director, Occupational Safety and Health Laborers' Health and Safety Fund of North America

**Philip Landrigan, MD, MSc**

Director, Global Public Health Program and Global Observatory on Planetary Health  
Professor, Schiller Institute for Integrated Science and Society; Boston College

**Laura Linnan, ScD**

Professor, Department of Health Behavior & Health Education; UNC Gillings School of Global Public Health Principal Investigator, Carolina Center for Healthy Work; Design and Worker Well-being\*

**Deborah McLellan, PhD, MHS**

Former Research Associate  
Center for Work, Health, & Well-being  
Harvard T.H. Chan School of Public Health

**Karina Nielsen, PhD**

Chair in Work Psychology  
Sheffield University Management School

**Cassandra Okechukwu, ScD, MSN, MPH**

Vice President, Health Equity Research  
UnitedHealth Group

**Margaret Quinn, ScD, CIH**

Professor Emeritus and Director, Safe Home Care Project; Department of Public Health & Lowell Center for Sustainable  
Production; University of Massachusetts, Lowell

**Daniel Schneider, PhD**

Professor of Public Policy, Harvard Kennedy School; Professor of Sociology, Harvard University; Investigator, California Labor Laboratory\*

**Martín Sepúlveda, MD, ScD**

Chief Executive Officer, CLARALUZ LLC  
Formerly VP, Global Well-Being Services and Health Benefits; IBM Corporation

**Emily Sparer-Fine, ScD**

Director, Occupational Health Surveillance Program; Massachusetts Department of Public Health

**Jessica Williams, PhD**

Associate Professor of Health Policy and Administration; Penn State College of Health and Human Development Investigator, Healthier Workforce Center of the Midwest\*

\*Total Worker Health Center



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Website: <https://centerforworkhealth.sph.harvard.edu/>

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