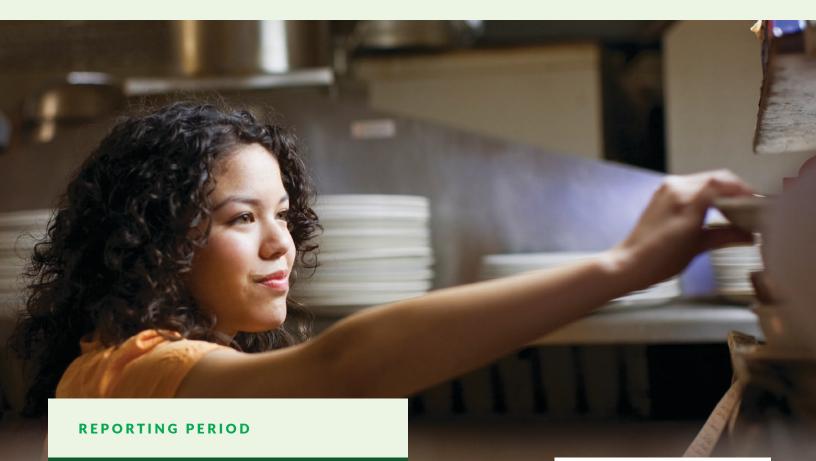
Oregon Healthy Workforce Center

FY23 Annual Report



Oregon Healthy Workforce Center is a National Institute for Occupational Safety and Health (NIOSH) *Total Worker Health*[®] Center of Excellence [Grant: NIOSH U19OH010154]



October 1, 2022
September 30, 2023





Oregon Healthy Workforce Center FY23 Annual Report

Contents

| Research Core | 2 |
|--|----|
| Center Highlights of Impact | 10 |
| Outreach, Education, and Dissemination | 16 |

Abbreviations

Institute: Oregon Institute of Occupational Health Sciences NIOSH: National Institute for Occupational Safety and Health OHSU: Oregon Health & Science University OHWC: Oregon Healthy Workforce Center TWH: Total Worker Health®

Center Summary and Major Goals

The Oregon Healthy Workforce Center (OHWC)'s mission is to advance worker safety, health, and well-being through research, education, outreach, and dissemination.

Our theme is *Total Worker Health*[®] intervention effectiveness, translation, and outreach to advance safe and healthy work design.

The center regional focus is the OSHA region 10 (Oregon, Washington, Alaska, and Idaho) However, its activities and impact reach far beyond this region.

The OHWC has twelve years of experience as a National Institute for Occupational Safety and Health (NIOSH) Center of Excellence in TWH.

It is housed within the Oregon Institute of Occupational Health Sciences (the "Institute") at Oregon Health & Science University (OHSU) in Portland, Oregon. OHSU is a mission-based organization with a vision "to make Oregon a national leader in health and science innovation for the purpose of improving the health and well-being of Oregonians and beyond."

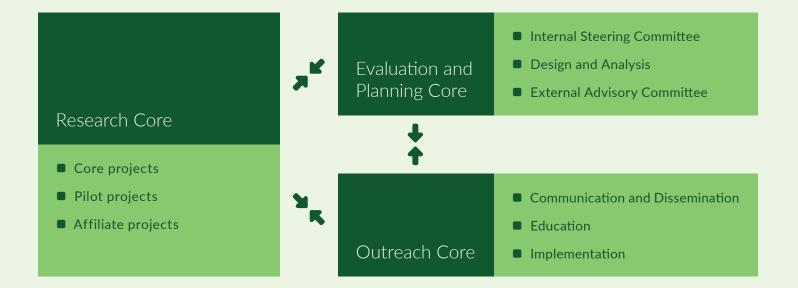
The OHWC serves this mission by bringing TWH research and innovations to Oregon and the Pacific Northwest region. We accomplish this through OHWC's operational cores – Evaluation and Planning, Research, and Outreach. Drs. Hammer and Olson are the center's co-directors and lead the evaluation and planning core.

OHWC's collaborative internal processes are managed through an internal steering committee. External advice and guidance are provided by an external advisory committee comprised of leaders from business, industry, insurance, labor, and academic organizations.





Ryan Olson, Ph.D. OHWC CO-DIRECTOR



External Advisory Committee



Pamela Ahr, CSP, ARM, MBA SAIF Director, Safe and Healthy Workplace Center



W. Kent Anger, PhD Professor, Oregon Institute of Occupational Health Sciences, OHSU



Tom Becker, MD, PhD Medical Epidemiologist, Member at Northwest Portland

Area Indian Health Board (NPAIHB)



Casper Bendixsen Director, National Farm Medicine Center and ICTR Director for Marshfield Clinic Research Institute



Shirley Block President-Business Representative, Amalgamated Transit Union Local 757



Stacy Chamberlain, JD

Executive Director, AFSCME Council 75; Oregon AFL-CIO Executive Board



Laura Chisholm, PhD, MPH, MCHES Section Manager, Injury and Violence Prevention, Oregon Health Authority



Beth Gray, DNP, RN, COHN-S, NE-BC System director of practice, employee safety and well-being, St. Luke's Health System, Idaho (Retired)



Laurel Kincl PhD, CSP Professor, Associate Dean for Academic and Faculty Affairs, Oregon State University



Larry Martinez, PhD Associate Professor, Portland State University



Christopher Simpson, PhD, Professor, University of Washington



Robert Sinclair, PhD Professor, Clemson University



Ronald L. Tubby, MS, MBA, CIH, CSP Senior Program Manager/Corporate Environmental Health and Safety, Intel Corporation

Oregon Healthy Workforce Center FY23 Annual Report



Research Core



Current Projects

Work-Life Check-Ins: A TWH Supervisor-Driven Burnout Intervention

LED BY Drs. David Hurtado and Abigail Lenhart

Burnout is a significant problem in health care with serious implications for occupational health and patient safety. The Work-life Check-ins intervention study aims to reduce burnout among workers at primary care clinics through brief (<30 minutes) and periodic (once per quarter or semester) one-on-one confidential meetings between team leaders and each team member. The Work-Life Check-Ins are expected to reduce burnout by boosting trust, support, and values alignment between clinic leaders and staff, as well as by increasing awareness and utilization of resources by staff members, and encouraging modifications in working conditions leading to burnout.

Three computer-based training modules were developed in 2022 for clinic leaders, after a pilot study identified that clinic leaders needed more instructions, examples and feedback prior to implementing the check-ins. The training modules include information on the check-in process, supportive leadership methods, and continuous improvement strategies.

In February 2023, baseline data collection began, which includes surveys that measure burnout and psychological distress and interviews with clinic leaders. To date, all 12 primary care clinics have completed baseline data collection. Overall, the response rate was 67% with a sample size of 491 clinic employees. Clinic leaders at all six intervention clinics have completed the training modules.

To ensure that clinic leaders feel comfortable conducting check-ins, we recommended leaders to practice the check-ins amongst themselves. Four of the six intervention clinics have completed this practice session. In two of the six intervention clinics, we have presented at all-staff meetings to introduce the check-ins to everyone. Two of the intervention clinics have initiated the check-ins in their clinics. Thank you letters with additional resources were sent to the six control clinics. The control clinics will receive a follow-up in a year.

WORK-LIFE CHECK-INS STUDY

Related Dissemination Activities

Presentation of findings

OCTOBER 2022

3rd International Symposium to Advance Total Worker Health[®] Bethesda, Maryland, U.S.

DECEMBER 2022

Oregon Institute of Occupational Health Sciences Fall Symposium: "Supporting a Diverse Workforce in the Face of Ongoing Societal Trauma" Portland, Oregon, U.S.

APRIL 2023

Institute for Work & Health and University of Toronto Toronto, Ontario, Canada

Peer-reviewed publication

JUNE 2023 Mayo Clinic Proceedings Rochester, Minnesota, U.S.

Recorded YouTube interviews

RELEASED IN JUNE 2023

Interviews for the Mayo Clinic Proceedings

Leader-Employee Check-ins Reducing Emotional
 Exhaustion

60 Seconds with Dr. David Hurtado on Leader Employee Check-ins

b Blog post

4

JUNE 2023 The Institute's blog "Oregon and The Workplace"

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Oregon Healthy Workforce Center FY23 Annual Report





A Natural Experiment for the Impact of Work Schedule on Cardiovascular Health and Safety in Firefighters

Shiftwork in Firefighters/SWIFT

LED BY Dr. Nicole Bowles

Firefighting is a high-risk occupation with high risk for injuries, illnesses, and comorbidities. New work schedules that provide firefighters with additional consecutive time off-shift, often at the cost of additional consecutive days on-shift, have been adopted across the country.

This schedule change may lead to an increase in accumulation of sleep loss. In the short-term, a reduction in total sleep time can increase rates of injury and accidents, and over the long-term, chronic insufficient sleep can lead to disease, as well as work-family conflict.

The physical, emotional, and cognitive stressors that firefighters face may worsen sleep and affect their ability to manage a healthy work-life balance. Thus, the SWIFT study aims to empower firefighters and other emergency service personnel to use an evidence-based approach when considering a work design that benefits their mental and physical health the most.

The SWIFT study team finalized data collection in January 2023.

SWIFT STUDY

Related Dissemination Activities

Presentation of findings

MARCH 2023

80th Annual Scientific meeting of the American Psychosomatic Society San Juan, Puerto Rico

MAY 2023

OHSU Research Week Portland, Oregon, U.S.

JUNE 2023

37th Annual Meeting of the Associated Professional Sleep Societies Indianapolis, Indiana, U.S

Published and distributed

One-page summary of the study to the Portland Fire and Rescue Bureau, participating firefighters and union leadership, based on feedback from these stakeholders. In addition, an infographic was prepared and distributed to participating firefighters.

Request for replication

NOVEMBER 2023

New study will begin for SWIFT study for firefighters in Utah, U.S.

SEE DISSEMINATION LIST FOR CITATIONS





Translating an Intervention To Address Chronic Pain Among Home Care Workers

COMPASS for Navigating Pain/COMPASS-NP

LED BY Dr. Ryan Olson

Community of Practice and Safety Support for Navigating Pain (COMPASS-NP) is a study evaluating the effectiveness of an intervention for home care workers experiencing chronic pain. Home care workers often work alone and lift people and objects without proper equipment, putting them at risk of injury and experiencing elevated pain. Preliminary research showed that more than 50% of home care workers surveyed met study-specific criteria for having elevated pain.

COMPASS-NP builds on an established and successfully disseminated OHWC intervention, COMPASS. COMPASS-NP will continue as a supportive groupbased program. Adaptations will include strengthened ergonomic protections through an online ergonomic assessment tool, and purchase of low-tech ergonomic tools for workers. Additionally, the curriculum will integrate cognitive behavioral therapy strategies for self-managing pain. To optimize the intervention's eventual dissemination potential, the program will be implemented virtually through web-based video conferencing.

The research team is also working with partner organizations in Oregon, Washington, and Idaho to tailor the materials to their audiences, utilize their training staff and resources when possible, and build the delivery of the program into systems familiar to the organizations.

Throughout the fall and winter of 2022–23, the study team adapted COMPASS lessons and developed new ones for a 10-week program.

COMPASS-NP was piloted with 19 caregivers from the state of Washington. Two groups of home care workers met virtually each week to learn about safety, health, and pain management topics, and provide each other with social support.

Caregivers finished their participation in the program in June of 2023 and pilot results were very strong (with five moderate-to-large effect sizes: d statistic range 0.45 to 1.47).

Since June of 2023, the study team has been revising the piloted program materials. The randomized controlled trail began in August, 2023.

RESEARCH CORE

COMPASS-NP STUDY Related Dissemination Activities



Presentation of findings

OCTOBER 2022

3rd International Symposium to Advance Total Worker Health®

Bethesda, Maryland, U.S.



Peer-reviewed publication MARCH 2023 *Trials.* BMC. Part of Springer Nature

SEE DISSEMINATION LIST FOR CITATIONS

Testimonial from a home care worker who participated in the pilot study

99

I would recommend this program because it's helped me so much. I feel like a totally different person. I was in so much pain when we started ... it just helped me heal and helped me be aware and it helped me communicate and start good practices that I've continued.

🛱 JILL

Caregiver and past COMPASS-NP participant



Development and Validation of a *Total Worker Health*[®] Climate Scale

LED BY Dr. Emily Huang

Emerging from her long-standing work on safety climate assessment, Dr. Huang's study focuses on the development of a TWH climate scale, encompassing the three dimensions of safety climate, physical health climate, and mental well-being climate. Using Dr. Huang's prior safety climate research as a model, the study applies scientifically validated methods to develop quantitative metrics that can serve as leading indicators of organizational safety, health, and well-being outcomes.

Through the implementation of the TWH climate scale, organizations will have the ability to assess and track the TWH status of their workforce. One-time implementation of the scale will serve as a data-driven diagnostic that allows organizations to identify problem areas and strategically guide improvement efforts.

The long-term implementation of the TWH climate scale will allow researchers and practitioners to track TWH intervention impacts, compile a benchmark database to assess TWH across industries, and help to advance the overall safety, health, and well-being of employees.

This scale was administered to a general sample of employees from various industries contacted by a survey panel provider in late 2022 to test the feasibility of the scale, the efficacy of the items, and the structure of the model. The survey was then administered to two companies in March and April 2023, and the data was used for further validation of the scale by connecting scores on the climate scale to outcomes at both the individual and workgroup level, as well as to provide feedback to the companies based on their survey results.

This feedback was shared in workshops that took place on May 24 and June 2, 2023, in which findings from the survey were shared with top management, and future directions were strategized. The results of the validation culminated in the addition of a physical health climate scale and a well-being climate scale, which generate an overall TWH climate scale when combined with the previously vetted safety climate scale.

Each subdimension is significantly linked to outcomes both within and outside of their domain, like perceptions of general health, sleep quality, depression, anxiety, and work-life balance. These scores are also related to important HR outcomes such as job satisfaction, turnover, and engagement.

The overall TWH climate score also has some utility, being related to outcomes as well. Multilevel analysis also shows that these perceptions exist at both the individual level and group level.

TWH CLIMATE SCALE STUDY Related Dissemination Activities

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Presentation of findings OCTOBER 2022

3rd International Symposium to Advance TWH Bethesda, Maryland, U.S.

SEE DISSEMINATION LIST FOR CITATIONS

RESEARCH CORE



Featured Affiliate Programs

TWH is a research theme at the Institute, which retains a robust research portfolio on worker safety, health, and well-being, vis-à-vis our affiliate programs.

Here are recent developments from some of these programs.



Evidence-based Mental Health Training

OHWC Co-Director, Dr. Leslie Hammer, recently launched Workplace Mental Health Training for Managers which is a one-hour, online training that was originally developed for active-duty military and has been customized and piloted in non-military workplaces.

It teaches managers tangible skills to: effectively support employees' mental health and recognize and respond to warning signs of distress in ways that are appropriate and actionable in all workplace settings.

LEARN MORE HERE



The Oregon Occupational Public Health Program (OPHP) including the Oregon Fatality Assessment and Control Sub-Project

The OPHP is a NIOSH-sponsored Occupational Health Surveillance program led by Dr. David Hurtado and Jennifer Seamans of the Oregon Health Authority.

The program conducts surveillance, investigation, and assessment of traumatic occupational fatalities in Oregon, and produces safety materials to inform preventive practices. Investigation reports of tragic fatalities occurring in various industries are periodically released.

Learn more about OR-FACE, access the latest annual report, and read the latest cases that occurred in the construction and agriculture industries.

ELEARN MORE HERE



Learn more about applied research at the Institute.



Center Highlights of Impact



Expanding Total Worker Health[®] Research Capacity and Knowledge in the Region

OHWC Pilot Program Launched

OHWC launched its first call for pilot project proposals during this reporting period in the summer, 2023 (pilot program awards are available in years three, four and five of the grant cycle). As in previous cycles, our pilot program supports TWH-focused studies that align with the OHWC's theme and advance the NIOSH TWH agenda. In this year's call, we included a regional emphasis in the call for proposals (OSHA region 10) and received competitive applications from Washington, Oregon, and Idaho. Awarded one-year projects beginning in 2023 include:

Prevent Aggression and Support Safety in Work Life (PASS): A Multifaceted Intervention to Promote Health Care Worker Safety, Physical and Mental Health

• Liu-Qin Yang Portland State University

Nanette Yragui
 Washington State Bureau of Labor and Industries

Enhancing Total Worker Health® through Supervisor-level Culture and Climate Mobile Training Intervention Programs

• Emily Huang Oregon Institute of Occupational Health Sciences

OHWC Personnel Grant Awards

Within the fiscal year 2023, our team has received the following research grant awards:

1

Examination of a Firefighter's Work Schedule on Sleep Regularity and Performance

Aanu Ayeni, research associate at the Institute and a member of Dr. Nicole Bowles' Lab, received the Professional Training Opportunities Program Award from NIOSH Education and Research Center pilot program at University of Washington.

<u>READ OUR SPOTLIGHT ON AANU HERE.</u>

2

Bringing Employee and Patient Safety to Rural Hospitals in Oregon

Dr. David Hurtado (PI) and his team have recently received a five-year grant from the Agency for Healthcare Research and Quality to conduct a cluster randomized controlled trial in six rural hospitals in Oregon. The aim is to evaluate the effectiveness and process of a safety program titled Safety Integration Stakeholders (SAINTS). The SAINTS program is expected to positively impact outcomes by identifying and training hospital stakeholders for both worker and patient safety on strategies to boost environmental, administrative, and educational precautions.



3

Building a Safe, Healthy, and Respectful Workplace for Tradeswomen. Built on the Development and Validation of the Respectful Workplace Scale in the Construction Industry

Dr. Emily Huang (PI), received a NIOSH R21 twoyear grant to identify the unique safety and health experiences tradeswomen face and quantify the identified factors that influence tradeswomen's safety, health, and well-being. A mixed methods systems approach integrating both qualitative and quantitative methods will be used to identify and quantify important factors that impact tradeswomen's TWH. Potential solutions and strategies to address concerns will also be identified.

4

12

Evaluating the Impact of the New Oregon Overtime Law on Farmworkers' Work Experiences and Well-Being

Dr. Leslie Hammer was awarded a new pilot grant to evaluate the impact of a state-level overtime legislation on farmworkers' psychosocial and physical hazards (e.g., wage theft, work overload, stress, job insecurity, injuries, perceived safety), health and well-being. This pilot program is offered by the Pacific Northwest Agriculture Safety and Health Center.

5

Adoption of Respectful Workplace Best Practices in Construction

Dr. Erin Flynn, director of outreach at the Institute, is leading a two-year (renewable to four) project with Dr. Emily Huang and the Oregon Bureau of Labor and Industries to promote respectful workplaces in the construction industry in Oregon. This project represents current state-directed efforts to improve diversity in the construction workforce. Project outputs include an online portal, streamlining several evidence-based and evidence-informed tools, trainings, frameworks, and guidelines; all designed to facilitate the adoption of respectful workplace practices by different types of construction jobsites in Oregon. A key component of the project will be the development of a TWH and Respectful Workplace curriculum for the construction industry.



Practitioner Training

We continue to disseminate TWH best practices and train practitioners and working professionals with multidisciplinary backgrounds. Overall, we have trained over 200 professionals in the TWH approach, thereby building capacity for utilization of validated organizational approaches to advance worker health, safety and well-being. These trainings are primarily delivered through two key partnerships:

1

Oregon Total Worker Health® Alliance Curriculum

In this reporting period, we delivered four TWH 101 sessions, one TWH Workplace Solutions session, two TWH Awareness sessions, and two TWH 101 Train-The-Trainer sessions.

- Loved the introduction and concept. Really encouraged to partner with our [diversity, equity, and inclusion], human resources, and values departments to understand next steps. – TWH 101: MARCH, 2023
- I thought the TWH series was wonderful, and I hope to have the chance to tell others about it. It was refreshing to hear from others who have implemented TWH how it has positively impacted their organization. The instructors are extremely knowledgeable and had immediate answers for all questions asked. TWH 101: JULY, 2023

2

Regional Total Worker Health® Certificate Program

A TWH certificate program is being offered by OHWC's new educational partnership with the University of Washington's Department of Environmental and Occupational Health Sciences. the Pacific Northwest OSHA Education Center. and the Portland State University's Occupational Psychology TWH Program. The certificate is designed to equip working professionals with a deep and practical understanding of the TWH approach and to improve communication skills to effectively convey the importance of TWH to all levels of an organization, from employees to leadership. To obtain this professional certificate, participants need to complete a 26-hour online course called TWH: Advancing Well-being in the Workplace, in addition to other continuing education courses such as safety and health management, supervisory duties, leadership development, ergonomics, root cause analysis and industrial hygiene. The TWH course was first offered in an online format on May 2023. Currently, the course has been revamped with the support of an instructional designer and going forward will be taught using a combination of online synchronous and asynchronous modules to better accommodate working professionals' busy schedules.

LEARN MORE ABOUT OUR VARIOUS TWH EDUCATIONAL OPPORTUNITIES.



Expanding Partnerships with State Government Agencies

OHWC has a rich history of working with several state agencies through research and outreach efforts.

New partnerships have emerged this year, strengthening existing collaborations and creating new opportunities for research translation.

One key new partnership developed during FY23.

1

Development of Respectful Workplace Climate Scale

OHWC researcher, Dr. Emily Huang, has partnered with the Oregon Bureau of Labor and Industries and the Oregon Department of Transportation to develop and validate a tool to assess respectful workplace climate and culture within the construction sector. The tool will help organizations measure employee sentiments regarding respectful workplace climates and cultures, while identifying areas for improvements.



14

Learn about the Respectful Workplace Climate Scale.

Diversity, Equity, and Inclusion Efforts (DEI)

Safe From Hate Alliance

We continue to contribute to the equity and inclusion efforts of the Safe From Hate Alliance, a state-wide partnership comprised of employers, trade associations, unions, public agencies, community organizations, and tradesworkers in the construction industry, with the goal to collectively advocate for improving jobsite culture in the construction industry. Many organizations have joined the Alliance and signed the Safe from Hate Positive Jobsite Culture Pledge. The Center has supported the Alliance's foundational efforts since 2020 and continues offering expertise and resources in TWH such as Dr. Emily Huang's Respectful Workplace Climate Scale, which will become available in the upcoming months.

Supporting Health Equity and Diversity, Equity, and Inclusion efforts of the Health Enhancement Research Organization (HERO)

Dr. Anjali Rameshbabu, OHWC's program manager and Outreach Core MPI, served as external reviewer on the newly published report by HERO titled Advancing Workforce Health Equity—DEI Informed Policies and Practices. The report offers actionable guidance and real-world examples from various organizations as they implement DEI-focused strategies, particularly in areas of recruitment and retention; work-life integration and leave benefits; health benefits; wages and compensation; and communication.

<u>READ OUR RECENT BLOG ON DEI.</u>

Internal DEI Supportive Processes

In early 2021, we launched a concerted effort to integrate DEI-informed processes in OHWC's planning, evaluation, research, and outreach activities. Through a dedicated standing DEI item at monthly internal steering committee meetings, OHWC researchers and project staff dive into pressing and emerging DEI topics. Discussion topics in this reporting period include: Public Psychology; recruiting a diverse sample; reaching diverse and underrepresented communities through outreach and partnership activities; farmworker population research; centering our populations in research and the social justice lens; social media recruitment for qualitative research; and the Equity Impact Tool. Several OHWC personnel members are also participating in a workshop for implementing the Equity Impact Review Tool at University of Washington, the developer of the tool.

Recognitions, Promotions and New Members

 Congratulations to OHWC co-director, Dr. Leslie Hammer for her recognition as one of ten most influential women scholars in health promotion by the American Journal of Health Promotion (AJHP).

<u>READ THE ANNOUNCEMENT.</u>

- We are thrilled with the promotion of OHWC researchers, Dr. David Hurtado, PI of Work-Life Check-Ins Project and Dr. Saurabh Thosar (OHWC affiliate researcher) to the rank of associate professor at the Institute.
- The Institute welcomes three new members to our outreach team: Amy Spring, senior outreach and dissemination specialist; Dr. Katia Costa-Black, senior manager for education and partnerships; and Shaun McGillis, senior communication specialist. This new team continues to advance the institute's research-to-practice efforts and support the strategic plan for the OHWC.

READ MORE ABOUT <u>AMY</u>, <u>KATIA</u>, AND <u>SHAUN</u>.





Outreach, Education, and Dissemination

We have continued to uphold our stakeholder partnerships, present at occupational health, safety, and wellness conferences, host community education events, and disseminate our work through academic and popular media avenues.

Outreach

The outreach team grew in the current project year. The new team supports all the outreach activities for the Institute as well as the OHWC. We continue to develop stakeholders' partnerships, disseminate research outputs and provide education to various professionals and communities in Oregon and the Pacific Northwest. The team consists of the following members:



Katia Costa-Black, PhD Senior Manager of Education and Partnerships and Outreach Core MPI

Katia brings her expertise as an educator and practitioner in occupational safety and health, and her research experience in participatory and translational methods. She is responsible for the TWH educational portfolio of the Institute and is an active member of several professional associations and committees. On Sept. 1, 2023, Katia joined Dr. Rameshbabu as MPI of the Outreach Core of the Center.



Erin Flynn, PhD Director of Outreach

Erin brings expertise in strategic management and workforce development with over 30 years of experience in the public and private sector.



Shaun McGillis Senior Communications Specialist

Shaun leads the center's communication and dissemination activities including the translation of research for non-academic audiences utilizing various avenues. Prior to joining OHWC, Shaun was communications manager and science writer for the Office of Research and Graduate Studies at Portland State University.



Anjali Rameshbabu, PhD OHWC Center Manager And Outreach Core MPI

Having co-led OHWC's Outreach Core since 2016, Anjali has played key roles in building OHWC's research-topractice and dissemination-implementation focus.



Amy Spring, MPA Senior Outreach and Dissemination Specialist

Amy supports a broad range of outreach activities at the Institute, including practitioner-oriented education, research dissemination, event planning, and science communication. She has over 20 years of experience with teaching methodologies that match the needs and interests of various community-based organizations.

Highlights of Our Outreach Activities in Fiscal Year 2023

In-Person Conference Exhibitions

To enhance visibility of our TWH tools and educational trainings, along with providing one-on-one information to practitioners about our research outputs, the outreach team presented at various regional events during the FY23.

EXAMPLES

Mid-Oregon Construction Safety Summit and 20th Annual COSHA Bend, Oregon, U.S.

i ∃anuary 2023

≈ 200 🚨 ATTENDEES

Oregon Governor's Occupational Safety and Health Conference **Portland, Oregon, U.S.**

苗 March 2023

≈ 1,500 🚨 ATTENDEES

VPP Region X Northwest Safety and Health Summit Kennewick, Washington, U.S.

📛 May 2023

≈ 400 🚨 ATTENDEES

Blue Mountain Occupational Safety and Health Conference Pendleton, Oregon, U.S.

📛 June 2023

≈ 280 🚨 ATTENDEES



Stakeholder Partnerships

In FY23, we have strengthened existing partnerships and created new opportunities to bring awareness of TWH to leaders of organizations and individuals representing professional groups and community-based groups.

EXAMPLES

- Solution Presented and Industry
- STREET Oregon OSHA
- Oregon Health Authority, Office of Health, Safety, and Employee Well-being
- American Society of Safety Professionals, Columbia-Willamette Chapter
- American Industrial Hygiene Association
- Soregon AFL-CIO
- SAIF Corporation
- Safe From Hate Alliance
- University of Washington's Department of Environmental & Occupational Health Sciences
- ≵ Wellbeing Think Tank



Education | Highlights of our education activities in FY23 include.

Biannual Symposia

Fall Symposium 2022: Supporting a Diverse Workforce in the Face of Ongoing Societal Trauma

With the bombardment of ongoing chronic societal stressors like overturning of Roe v. Wade, the Black Lives Matter movement and race-related violence, the war in Ukraine, mass shootings, and climate change, employers are now confronted with the need to protect and navigate a workforce dealing with collective societal trauma, in addition to the stressors at both work and home. We had excellent speakers from academia and industry who are navigating these challenges and developing solutions to protect the well-being of a diverse workforce.

📁 WATCH RECORDING

December 9, 2022

131 🚨 ATTENDEES

Testimonials from attendees

4.48 OF 5 RATING FOR EVENT QUALITY

 I wish I knew about managing trauma in the workplace earlier in my career.

Spring Symposium 2023: Sleep and Shift Work: Implications for Worker Health and Safety

The event brought together internationally renowned researchers and industry practitioners for a day of learning focused on how sleep impacts health and safety in the workplace and beyond, and recommendations for occupations with shift work schedule.

👸 WATCH RECORDING

➡ June 16, 2023
87 ♣ ATTENDEES

Testimonials from attendees

4.5 OF 5 RATING FOR EVENT QUALITY

- O Thank you for hosting this event. The topic is timely and relevant for those who work shift work.
- O This event was inspiring. We heard some amazing local and national researchers but really the inspiration came from the firefighters and police workers who are part of the research programs.

Academic Education

Guidance on a *Total Worker Health*[®]-Focused Thesis in Mozambique, Africa

We provided guidance to Arline Ferrão, a social and organizational psychologist from Mozambique, Africa. Arline reached out to OHWC as she began her Master thesis two years ago and has since completed her study—*Total Worker Health*[®] as a Model for Diagnosis and Intervention: A Case in an Organization. OHWC, led by Helen Schuckers (previously, OHWC dissemination specialist) and Dr. Anjali Rameshbabu (center manager and outreach core MPI), provided TWH guidance, feedback on Arline's thesis, and shared TWH resources.

<u>READ OUR BLOG ON ARLINE'S WORK.</u>

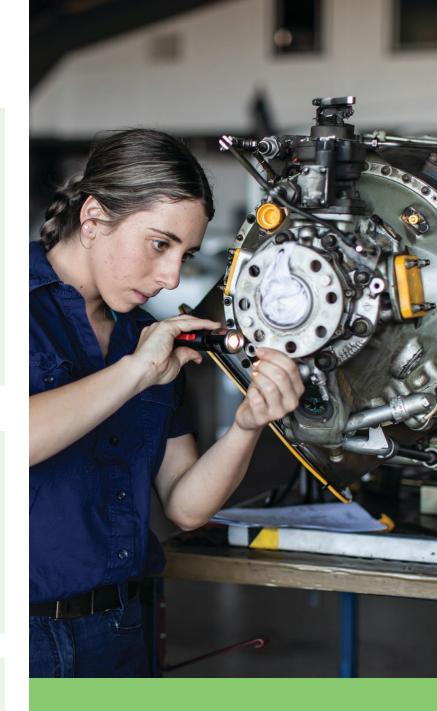
Cascadia Occupational and Environmental Health Academic Consortium (COEHAC)

We continue to meet regularly with COEHAC—formed in 2020—a consortium between OHWC, OHSU, Portland State University, Oregon State University, University of Washington, and University of British Columbia to streamline occupational health and TWH-themed course offerings in our region for students and faculty.

Integrating *Total Worker Health*[®] to the MPH curriculum

ESHH 521/621, 4 CREDITS, WINTER 2023

Ryan Olson, OHWC co-director, and Dr. Saurabh Thosar, OHWC affiliate researcher, developed and delivered the course Occupational Health, which was explicitly designed to teach the TWH approach. This is a required course for the for the MPH in Environmental Systems and Human Health at the OHSU-PSU School of Public Health.



Practitioner Education

Oregon TWH Alliance Curriculum: The Alliance is a state-wide partnership between the Institute, Oregon OSHA, and SAIF Corporation.

Through this partnership, a series of TWH-focused courses are offered and are designed to meet the principles and guidance of the NIOSH's TWH approach and features, while meeting the needs of practitioners.

In the FY23 the following alliance courses were delivered.

20

OUTREACH, EDUCATION, AND DISSEMINATION

1

Total Worker Health® 101: The Basics

The goal of this training is to introduce key concepts and the five defining elements of TWH and prepare participants to develop initial steps to implement TWH in their organization. TWH 101 was delivered in-person and online. (3-hour)

95 🚨 TOTAL ATTENDEES FROM THREE EVENTS

MARCH 9, 2023

PORTLAND, OREGON, U.S.

Oregon Governor's Occupational Safety & Health (GOSH) Conference

APRIL 18, 2023

PORTLAND, OREGON, U.S.

American Federation of Government Employees National VA Council 2023 Health & Safety Conference

MAY 31, 2023

SALEM, OREGON, U.S.

Internal Professional Development Training for SAIF Corporation

Liz and Katia do not disappoint. These two are the experts on this topic. Thanks for sharing your knowledge. – GOSH: MARCH, 2023

2

Total Worker Health® Workplace Solutions

The goal of this training is to demonstrate evidencebased TWH solutions and promising practices and help participants to develop an initial action plan to implement TWH in their organization. (3-hour)

23 🚨 ATTENDEES

MARCH 9, 2023

PORTLAND, OREGON, U.S.

Oregon Governor's Occupational Safety & Health (GOSH) Conference

 Going over case studies to see other jobs and what they were able to accomplish lets us know that any company can accomplish this as well.
 – GOSH: MARCH, 2023

3

Total Worker Health® Awareness Workshop

The goal of this workshop is to introduce the topic of TWH approach to a variety of professional groups, and motivate an interest in advancing health, safety and well-being outcomes. (1.5-hour)

73 . TOTAL ATTENDEES FROM THREE EVENTS

MAY 17, 2023 PORTLAND, OREGON, U.S. Northwest Safety & Health Summit by Region X VPPPA

SEPTEMBER 13, 2023

State Resource Liaison Virtual Meeting for APTA-AOPT Occupational Health Special Interest Group

SEPTEMBER 22, 2023BEND, OREGON, U.S.The 58th Convention of the Oregon AFL-CIO

There is value in this topic with the changing dynamic in the world and workplace. I also believe sleep studies are also important. Finding ways to beat the stigma and bridge the gap of communication of the subject of mental health. – VPPPA: MAY, 2023

4

Total Worker Health® 101 Train-the-Trainer

The goal of this training is to provide participants with the preparation needed to bring TWH instruction to their organization and enhance their confidence to facilitate TWH 101. (8-hour)

FOUR VIRTUAL 2-HOURS SESSIONS

29 🚨 ATTENDEES

VIRTUAL

OCTOBER 2022 AND JULY 2023

I thought the TWH series was wonderful, and I hope to have the chance to tell others about it. It was refreshing to hear from others [SAIF people] who have implemented TWH how it has positively impacted their organization. The instructors are extremely knowledgeable and had immediate answers for all questions asked. – JULY, 2023

New Courses Launched

Total Worker Health[®]: Advancing Well-Being in the Workplace

A regional TWH certificate is now available through the Continuing Education Program of the University of Washington Department of Environmental & Occupational Health Sciences. To obtain this professional certificate, participants need to complete a 26-hour virtual course in TWH. Dr. Katia-Costa-Black plays a key role in designing and developing the certificate and in teaching the course.

OSHA Endorsed Training in the Principles of Ergonomics

Dr. Katia-Costa-Black is the instructor for this course which it is offered as an elective class for the TWH certificate (18 contact hours). The course covers the application of ergonomic principles to control workplace conditions that cause or contribute to musculoskeletal and nerve disorders, and it also highlights the TWH as an approach for addressing more comprehensively working conditions affecting health and well-being. It was taught in person from March 27-29, 2023 at the OSHA training center in Portland, Oregon, and it has been offered again in a virtual instructor-led format from August 22-24, 2023. The course attracts residents or employees within OSHA Region 10 (Alaska, Idaho, Oregon, and Washington).

LEARN MORE

Occupational Health for Nurses Fundamentals

Geared toward practicing nurses/nurse practitioners, recent nursing graduates, current nursing students, and nurses in Washington state, this online course (four contact hours), offered through the University of Washington, brings together content from an expert line-up of faculty and practicing professionals in an online, on-demand format that includes video lectures, interactive activities, and case-based problem-solving with the goal to increase competency of nurses and other health care providers who have occupational health responsibilities. Dede Montgomery, former OHWC practice lead and outreach core MPI, led the development of the TWH component of this course.

O LEARN MORE

22



Supporting Knowledge Building in the Larger Total Worker Health® Community

OHWC serves as founding and advisory member on the newly launched Society for TWH, launched during the 3rd International TWH Symposium in October 2022. Led by the Center for Health, Work, and Environment (a NIOSH TWH Center of Excellence in Colorado), the Society is a collaboration of the NIOSH TWH centers, government, community and advocacy groups, industry, labor, inter-disciplinary representatives, and professional network groups, and will serve as a hub and community for sharing new and innovative ideas to expand TWH research, training, education, dissemination, and realworld solutions. The Society's kick-off meeting was held in January 2023.



Learn more about The Society for Total Worker Health®

OUTREACH, EDUCATION, AND DISSEMINATION

Dissemination

Highlights of our dissemination activities in FY23

Dissemination in Peer-Reviewed Journals

Bouleh, P. G., Allen, S. J., Hammer, L. B. (2022). Family-Supportive Supervisor Behaviors and Psychological Distress: A Secondary Analysis across Four Occupational *Populations*. *Int. J. Environ. Res. Public Health*, 19(13), 7845.

loi.org/10.3390/ijerph19137845

Brossoit, R. M., Hammer, L. B., Crain, T. L., Leslie, J. J., Bodner, T. E., Brockwood, K. J. (2023). The effects of a Total Worker Health intervention on workplace safety: Mediating effects of sleep and supervisor support for sleep. *Journal of Occupational Health Psychology*, 28(4), 263–276.

doi.org/10.1037/ocp0000357

Huang, Y. H., Sears, J. M., He, Y., Courtney, T. K., Rega, E., Kelly, A. (2022). The utility of a safety climate scale among workers with a work-related permanent impairment who have returned to work. *Work* (Reading, Mass.), 73(3), 927–936.

loi.org/10.3233/WOR-205285

Huang, Y. H., Lee, J., Chen, Z., DeArmond, S., Kelly, A., He, Y. (2023). A Spanish translation of Zohar and Luria's safety climate scale and a test of measurement equivalence. *Safety Science*, 165, 106191.

doi.org/10.1016/j.ssci.2023.106191

Hurtado, D. A., Greenspan, S. A., Valenzuela, S., McGinnis, W., Everson, T., Lenhart, A. (2023). Promise and Perils of Leader-Employee Check-ins in Reducing Emotional Exhaustion in Primary Care Clinics: Quasi-Experimental and Qualitative Evidence. *Mayo Clinic Proceedings*, 98(6), 856–867.

doi.org/10.1016/j.mayocp.2022.12.012

Marin-Farrona, M., Wipfli, B., Thosar, S. S., Colino, E., Garcia-Unanue, J., Gallardo, L., Felipe, J., Lopez-Fernandez, J. (2023). Effectiveness of worksite wellness programs based on physical activity to improve workers' health and productivity: a systematic review. *Systematic Reviews*, 12, 87.

e doi.org/10.1186/s13643-023-02258-6

Olson, R., Cunningham, T. R., Nigam, J. A. S., Anger, W. K., Rameshbabu, A., Donovan, C. (2022). *Total Worker Health®* and Organizational Behavior Management: Emerging Opportunities for Improving Worker Wellbeing. *Journal of Organizational Behavior Management*.

loi.org/10.1080/01608061.2022.2146256

Olson, R., Hess, J. A., Turk, D., Marino, M., Greenspan, L., Alley, L., ... Rice, S. P. M. (2023). COMmunity of Practice And Safety Support for Navigating Pain (COMPASS-NP): study protocol for a randomized controlled trial with home care workers. *Trials*, 24(1), 264.

loi.org/10.1186/s13063-023-07149-8

Olson, R., Johnson, P. W., Shea, S. A., Marino, M., Springer, R., Rice, S. P. M., Rimby, J., Donovan, C. (2023). The Tech4Rest randomized controlled trial: Applying the hierarchy of controls to advance the sleep, health, and well-being of team truck drivers. *Journal of Occupational and Environmental Medicine*.

doi.org/10.1097/JOM.000000000002941

Olson, R., Rice, S. P. M., Bauer, T. N., Wipfli, B., Anger, W. K., Bodner, T., Graven, P., Greenspan, L. S. (2023). Primary Prevention of Weight Gain Among New Bus Operators: Results of the "Success & Health Impacts For Transit operators during Onboarding" (SHIFT Onboard) Pilot Study. *Journal of Occupational and Environmental Medicine*, 65(2), 128-139.

doi.org/10.1097/JOM.000000000002699

Book Chapters

Occupational Stress and Well-Being: Workplace Interventions Involving Managers/Supervisors (2023)

In L. Lapierre, C. Cooper (Eds.)

Cambridge Companion to Organisational Stress and Well-Being (pp. 389–417)

Cambridge, United Kingdom: Cambridge University Press

Hammer, L. B., Allen, S. J., Leslie, J. J.

The Work-Nonwork Interface: Policy and Practice (2023) In L. E. Tetrick, J. C. Quick, Fisher, G. G., M. T. Ford (Eds.)

Handbook of Occupational Health Psychology (3rd ed.) American Psychological Association

B Hammer, L. B., Crain, T. L.



Reframing Work-Family Balance for Senior Military Leaders (2023)

In M.P. Hosie, M.L. Sipos, T.W. Britt (Eds.)

Maximizing Senior Leader Health and Wellbeing (pp. 141–161)

Carlisle Barracks, Pennsylvania, U.S.: U.S. Army War College Press

Steadman, A.C. Britt, T.W., Hammer, L.B.

Dissemination in Academic Events

OCTOBER 2022 PANELS Current Research Projects Within the Oregon Healthy Workforce Center Bowles, N., Olson, R., Huang, Y.H., Hurtado, D. (in no order) Accelerating Research to Practice: Connect With NIOSH TWH Centers. Outreach Core Directors of the Total Worker Health Centers of Excellence Rameshbabu, A. **ORAL PRESENTATIONS** Training To Build TWH Capacity: Lessons Learned and Ideas for Future Development B Hammer, L., Banks, C., Linnan, L., Davis, M., Tenney, L. (in no order) Work Organization as a Core Dimension of TWH: Toward an Expert Consensus B Hammer, L., Cunningham, C., Sabbath, E., Nielsen, K. (in no order) The Readiness Supportive Leadership Training (RESULT): A Description of an Integrated Supervisor Support Mental Health Intervention. In Using the Total Worker Health® Approach To Support Worker Physical and Mental Health B Hammer, L. B., Dimoff, J. K., Allen, S. J., Mohr, C. D. □ Integrated Approaches to Mental Health in the Workforce

- Hammer, L., Goetzel., Cunningham, C., Dimoff, J., Quiros-Alcala, L. (in no order)
- ↓ Lessons Learned From TWH Training of Occupational Safety and Health Professionals
- S Montgomery. D., Hill, L. Tenney, L., Cavallari, Nobrega, S. (in no order)

ORAL PRESENTATIONS CONTINUE NEXT PAGE

24

OUTREACH, EDUCATION, AND DISSEMINATION



- Samson, M.D., Mohr, C. M., Lee, J.D., Hammer, L.B.
- □ Increasing Belongingness Through Enhanced Leader Support: Evidence From an RCT With Active-Duty Military Service Members.
- B Mohr, C. D., Hammer, L. B., Dimoff, J., Lee, J. D., Arpin, S., Umemoto, S. K., Allen, S., Brockwood, K., Bodner, T., Mahoney, L., Dretsch, M. N.
- The Society for Personality and Social Psychology. Atlanta, Georgia, U.S.

APRIL, 2023

ORAL PRESENTATION

PANEL

Taking the Psychological Pulse of Health Care Workers During the First Two Years of the COVID-19 Pandemic.

B Hurtado, D.

Institute for Work and Health, University of Toronto. Toronto, Ontario, Canada

APRIL, 2023

PANEL

ALTERNATIVE SESSION TYPE WITHOUT MULTIPLE PAPERS

Making Work, Work: A Multidisciplinary Approach.

Maneethai, D., Banks, C. G., Cunningham, C. J. L., Hammer, L., and Witt, L. A.

POSTERS

- ➡ Is It All Relative? An Examination of Relational Demography and Perceptions of FSSB.
- Schemmel, E., Crain, T. L., Bodner, T., Mohr, C., Hammer, L.
- Society for Industrial and Organizational Psychology Annual Conference, Boston, Massachusetts, U.S.

JUNE, 2023

ORAL PRESENTATION

- ➡ The Impact of Work Schedule on Firefighter's Sleep and Social Health.
- Bowles, N.
- Ambulatory Blood Pressure Monitoring Does Not Reduce the Sleep of Off-Duty Firefighters.
- Ayeni A., Haswarey A.H., Ordaz O., Robinson L.D., Abdelmoaty W., Herzig M. X., Hurtado D., McHill A.W., Gonzalez J., Bodner T., Shea S.A., Bowles N.P.
- SLEEP 2023, Indianapolis, Indiana, U.S.

AUGUST, 2023

26

ORAL PRESENTATION

- ➡ The Effects of Platoon Leader Mental Health and Resilience Training on Soldier Anger and Life Satisfaction.
- Hammer, L.B., Allen, S. A., Mohr, C. Lee, J. D.
- Military Health System Research Symposium, Kissimmee, Florida, U.S.

AUGUST, 2023

- Selected 1st place poster award at APA 2023 and Division 19 APA Society for Military Psychology
- Supportive-Leadership Training: A Key Component of a National Strategy to Reduce Loneliness.
- Mohr, C. D., Hammer, L., Dimoff, J., Lee, J. D., Arpin,
 S., Umemoto, S. K., Allen, S., Brockwood, K., Bodner,
 T., Mahoney, L., Dretsch, M. N.
- Annual Meeting of the American Psychological Association, Washington, DC, U.S.

SEPTEMBER, 2023 ORAL PRESENTATION

- ☑ Mind the Gap: Putting Science to Work in Health Promotion.
- Hammer, L., Sexton, K., Ling Sha, S. B., Ballard, F. D. W.
- Mental Health in the Workplace: The Critical Role of Managers.
- B Hammer, L.
- HERO Forum. Salt Lake City, Utah, U.S.

Dissemination in Non-Academic Events

| OCTOBER, 2022 | SESSION |
|---|----------------|
| Promoting a Sustainable Work-Nonwo Hammer, L. B., session moderator | ork Interface. |
| S NIOSH TWH webinar series | |
| | |
| OCTOBER, 2022 | PANEL |
| Approaching Your Wellness Program T Lens of Equity and Inclusion. Rameshbabu, A., Davis, T., Sayers Lehman | Through the |
| Approaching Your Wellness Program T Lens of Equity and Inclusion. | Through the |

OUTREACH, EDUCATION, AND DISSEMINATION

POSTER



Oregon and the Workplace Blog Posts Featuring Emerging TWH-Focused Updates

- 🔊 Can Workplace Check-Ins Reduce Emotional Exhaustion Among Employees in Primary Care Clinics?
- **b** U.S. Surgeon General Releases Advisory on Social Connection
- **b** Understanding Resilience and Micro-Aggressions with Dr. Danielle King
- **b** Increasing Construction Safety
- **b** TWH Podcast Episode: Sedentary Work
- 6 El Kit De Herramientas De Active Workplace Ahora Está Disponible En Español
- **b** Oregon TWH Alliance Podcast Episode
- A Total Worker Health Project Beyond Borders
- Diversity, Equity, Inclusion: Highlighting Efforts at Home and From Our Partners

Media Mentions and External Blog Posts



What's Work Got To Do With It? Podcast

Started in 2018, the goal of our <u>podcast</u> is to showcase the public health relevance of workplace issues, and to offer a friendly, informal platform to share our research.

During this past year, we released these episodes.

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Sedentary Work

327 Delays

Oregon TWH Alliance

174 Delays

The Great Resignation

195 Delays

Fishing Forward

199 Delays

895 Delays Started 2018
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28

OUTREACH, EDUCATION, AND DISSEMINATION

External Reach Through OHWC Media

Monthly Newsletter

15,000 SUBSCRIBERS

Featured Other Dissemination and Outreach Activities

Affiliate researchers at OHWC's home Institute presented at the Annual Workers' Compensation Conference of Oregon State Bar's Workers Compensation Section. Drs. Steve Shea, Nicole Bowles, Matt Butler, and Andrew McHill presented their collective research on sleep shiftwork and outcomes for workers.

😤 Learn more here.

The American Industrial Hygiene Association's TWH Advisory Group recently published a short guide to help occupational safety and health practitioners and workplace actors to have conversations about the application of ergonomics to TWH. This guide, called Ergonomics Talking Points was written by Dr. Katia Costa-Black, OHWC's Outreach Core MPI.

PDF Read the PDF.



Ergonomics Talking Points for the OEHS Professional

Developed by: *Total Worker Health®* Advisory Group Authored by: Katia Costa-Black, PhD

7.10.23

What is it?

Ergonomics adopts a systems approach to designing (or re-designing) effective work, and that requires consideration of relevant cognitive, physical, and organizational factors that can affect human work performance, health, and well-being. As such, it is an essential part of a *Tatal Worker Health®* approach. In a nutshell, its contributions to *Total Worker Health* (TWH) research are mainly the following:

- · Prevention and control of exposure to ergonomic hazards that can lead to musculoskeletal injuries, such as postural stress, repetition, vibration, static work and Workplace (re)design to reduce stress, sedentarism, distraction and discomfort, as
- well as to enhance worker well-being.
 Workplace (re)design to accommodate individuals with disabilities or suffering from chronic pain or illnesses.

Websites

Oregon Healthy Workforce Center

3,930 VIEWS **4,264** THROUGH AUG. 23, 2023

Oregon Institute of Occupational Health Sciences

30,920 PAGE VIEWS

YourWorkpath.com

O 326 PAGE VIEWS

OHWC Social Media

X (FORMERLY TWITTER)

1,213 FOLLOWERS

Facebook

508 FOLLOWERS

YouTube Channel

O 792 VIEWS

LinkedIn

511 FOLLOWERS, STARTED FALL 2020

Oregon and the Workplace Blog

Connect With Us

Oregon Healthy Workforce Center



5

www.ohsu.edu/ohwc

Oregon Institute of Occupational Health Sciences (home of OHWC)

www.ohsu.edu/oregon-institute-occupational-health-sciences

YourWorkpath

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