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Proceedings From a National Summit on Workplace Mental Health and Well-being

A Focus on the Graduate Academic Environment

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Objective: The aim of the study is to spotlight the challenges, gaps, and opportunities to improve workforce mental health and well-being in higher education institutions. **Methods:** We convened a full-day summit of subject matter experts from academia, business, government, and practice to share research and best practices on workplace mental health. **Results:** Highlights from the summit are presented in this paper covering the importance of leadership and culture; the mental health costs associated with being a Black STEM scholar; the role of the environment; case studies of three university mental health and well-being programs; and the future of work. **Conclusions:** Establishing a culture of caring requires leadership commitment, strategic planning, accountability and shared responsibility, and measurement and evaluation. Higher education institution leaders are called to lead by example; foster community partnerships; adopt a Total Worker Health framework; and regularly evaluate progress.

Keywords: workplace mental health, well-being, academic institutions, health and well-being, mental health, workplace, higher education

An acceleration in the decline in reported mental health and well-being for those in higher education institutions (HEIs) since the start of the COVID-19 pandemic has been well documented in a series of research articles and mass media articles.¹⁻⁴ For students, deteriorating mental health has been linked to fear of exposure to the virus, a sense of isolation and detachment from family and friends, virtual rather than in-person classes, increased pressure to succeed academically and enter the workforce, obtaining a satisfying job in one's field of study, and adjusting to financial strains made worse by increased costs of housing, food, transportation, medical care, and social activities.⁵

Recognizing these challenges to their student bodies, HEIs instituted or supplemented programs and services designed to lessen stressors. These have included easier access to counseling services,

LEARNING OUTCOMES

- Recognize the disparate impacts of the stressors faced by faculty and staff in higher education institutions (HEIs).
- Discuss examples of psychosocial factors, organizational conditions, and environmental exposures that can contribute to mental health and well-being among faculty and staff at HEIs.
- Identify best-practices of effective psychosocial, organizational and environmental interventions to improve HEI workforce mental health and well-being.

flexible curricula, tutoring support, and more inclusive social events. Less attention has been directed to staff and faculty employed at HEIs who have reported higher rates of anxiety and depression compared to the general population, both before and during the COVID-19 pandemic.^{6,7} In addition to their own mental health and well-being issues, faculty and staff often need to perform the tasks of surrogate parents whose job is to navigate students' journeys through newfound independence without traditional support of family members and long-time friends.

Many staff and faculty at all levels of educational institutions face work-related issues such as low wages and job insecurity, competing job demands, inadequate training, lack of recognition, scarce resources, lack of acknowledgement of their value built on a foundation of hierarchical structures, and on-the-job harassment exacerbated by unfair treatment because of their race, gender, ethnicity, and sexual orientation.⁸

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Moreover, faculty are constantly reminded that they must “publish or perish,”⁹ maintain their position by securing outside funding, recognize long timelines for promotion, acknowledge the lack of boundaries between work and nonwork lives, live with a sense of being overwhelmed, and be expected to navigate the often opaque and calcified bureaucracy that reinforces operational silos within their institutions.¹⁰

SUMMIT PURPOSE AND GOALS

Recognizing these hardships confronting staff and faculty at HEIs, the Johns Hopkins Bloomberg School of Public Health convened a *National Summit on Workplace Mental Health and Well-being: A Focus on the Graduate Academic Environment*. In June 2023, subject matter experts from across academia, business, government, and practice gathered in Baltimore, Maryland, to share research and best practices about workplace mental health in academia that address the psychosocial factors, organizational conditions, and environmental exposures.

This paper compiles the views of presenters who offered to contribute to this proceedings paper. Featured here are presentations that include topics on the importance of organizational culture for worker well-being (by Jim Harter, PhD), the mental health cost of being a Black STEM scholar (by Ebony O. McGee, PhD), environmental interventions aimed at addressing HEI employees' mental health and well-being (by Meghan Davis, DVM, MPH, PhD), three case studies of HEIs with promising and effective solutions across the psychosocial, organizational, and environmental domains (by Joan M. Troester, MBA, Lara Hilton, PhD, MPH and Kelcey J. Stratton, PhD), and where the future of work is heading (by Jay Vietas, PhD). The full Summit event can be viewed at this link¹¹ and its agenda can be found in the Supplementary Material (<http://links.lww.com/JOM/B685>).

Jim Harter, PhD: The Role Human Nature Plays in Organizational Success

Global workplaces and educational institutions are regrouping from the aftershock of changed work and education experiences wrought by the COVID-19 pandemic. These experiences demonstrated how work and education can be done differently. The pandemic also exposed vulnerabilities that threaten mental health and well-being.

Before the pandemic, organizational culture had been evolving—increases in diversity, more remote work, most workers in matrixed work arrangements, and more work with multiple teams and even multiple team leads. Digitization was changing the nature of work, and mobile technology began blurring the lines between work and life. Workplace flexibility became the most desired perk.¹² Management science had greatly advanced, but there was a significant gap between what modern science said made organizations better and what was practiced within organizations. Still, in 2019, only one in five global employees and one in three US employees was highly engaged in their work and workplace.¹³

The expectations of the new younger workforce also began to shift. Younger workers put a high priority on work with a strong mission or purpose. They did not just want a paycheck. The new workforce began seeking more development and meaningful feedback, a job that would improve their overall lives—and one that used their strengths to help make important contributions. The traditional management approach—highly administrative and delegatory—was losing steam. Young workers expected more “coaching” than “bossing.” These changing needs became magnified as a result of COVID-19.¹⁴

Stress has been rising globally for more than a decade, with increased intensity since 2020.¹⁵ Alarming, since 2020, diagnosed depression rates in the United States have risen to record highs—from roughly 20% prepandemic to 29% in 2023.¹⁵ The increases have been most prominent among young people, women, and minorities.

In its 2022 global study of well-being, Clifton and Harter¹⁶ found these five elements that contribute to thriving lives:

- *Career*—you like what you do every day;
- *Social*—you have meaningful friendships in your life;
- *Financial*—you manage your money well;
- *Physical*—you have energy to get things done; and
- *Community*—you like where you live.

Each of the elements was important in contributing to mental health and well-being of individuals. For example, 37% of people who were thriving in none of the five well-being elements were depressed or experienced burnout often or always. In contrast, among those thriving in all five elements, 3% were depressed and 9% reported experiencing burnout often or always. Across a wide variety of mental and physical health outcomes, the five elements of well-being were cumulative in their reduction of high-risk factors such as anxiety and various forms of disease burden.¹⁶

Clifton and Harter also found that the most foundational elements to build into an organizational culture were career and social well-being. People's identities are formed based on “what they do every day” and “who they spend time with.” When individuals had engaging work, whether at school or in business, they increased their chances of thriving in the other important elements in our lives.

Culture is, in essence, “how things get done around here”—the predictable norms that exist inside an organization, the sum of experiences and relationships. Gallup researchers found that there are common elements of human nature that require attention regardless of where people are in their career journey. For businesses, employees need clear goals, ongoing meaningful conversations that leverage their strengths, and high accountability so that they know how they and their colleagues are progressing.

For businesses, a highly engaging work culture predicts high customer engagement and retention.¹⁷ For universities, faculty and staff engagement predict student engagement.¹⁸ Engaged students have better experiences and carry those experiences to their jobs after graduation. Gallup researchers found that a key to engaging both employees and students is to identify the innate strengths of each person.¹⁹

Studies measuring momentary experiences suggest that knowing and using one's strengths is a conduit to high energy meaningful moments.²⁰ This translates into important positive organizational outcomes including higher manager and employee engagement, customer and employee retention, improved safety, and higher quality of work.¹⁴

In higher education, research suggests strengths-based feedback contributes to student engagement,²¹ student retention,²² career readiness,²³ course grades (Henry 2016, unpublished), and leadership development.²⁴

A study of 95,000 college alumni identified the following six undergraduate experiences that correlated with work engagement, overall well-being, ratings of college experience, and feelings of attachment to the college:²⁵

- At least one professor who made the student excited about learning;
- Professors who cared about the student as a person;
- A mentor who encouraged the student's goals and dreams;
- A long-term project taking a semester or more to complete;
- An internship or job where the student applied learning; and
- Being extremely involved in extracurricular activities and organizations.

Building a thriving culture is a function of the relationships and experiences that predictably happen inside an organization. While only 3% of all graduates reported having all six of the above experiences, 85% of this group strongly agreed that their college prepared them well for life outside of academia, compared to only 5% who had none of the six experiences. The above six experiences provide a bridge between understanding the academic and business communities

while also increasing the chance that graduates are prepared to have engaging work and thriving lives buttressed by resilience and mental health.

Ebony McGee, PhD: Dying to Succeed: Realizing the Price of Academic Success for Black Scholars (in STEM)

Racialized social systems perpetuate persistent negative outcomes for underrepresented, minoritized individuals, leading to the normalization of stressful academic and work environments where traditional markers of success overshadow individual well-being. Racially minoritized high achievers find themselves in situations where they literally sacrifice their health and well-being in pursuit of success. Dr. McGee drew upon scholarly research and personal testimonies to explore effective responses to structural inequities present in science, technology, engineering, and mathematics (STEM) academia.

To provide context, Dr. McGee shared her own experiences as a “recovering engineer.” While she initially obtained an engineering degree from a Historically Black College/University, she subsequently encountered a toxic, racialized, and race-gendered environment in the STEM industry. This prompted her to pursue postgraduate studies, researching the experiences of underrepresented high achievers in STEM using qualitative research methods.

There is a high cost of being Black and academically high achieving. Her research highlights a range of stressors experienced by minoritized academics in STEM including imposter syndrome, omnipresent stereotypes, and expectations that one individual represents everyone in their racial group.²⁶ These stressors can lead to John Henryism, where Blacks must work much harder than their White counterparts to cope with the day-to-day psychosocial stressors that are ubiquitous in their educational contexts.

Too often, people respond to these phenomena from an individualistic standpoint rather than a systemic one. One commonly proposed response to these challenges is to emphasize resilience and grit in the face of systemic racism. However, individualized forms of resilience and grit alone cannot resolve the deeply ingrained racialized and stressful nature of the STEM environment. Resilience is not a panacea. This approach places the onus on individuals to “fix” (read; alter) themselves rather than on collective, societal, and structural efforts to detoxify STEM.

The stark reality is that Black women and girls face disproportionately higher health and well-being risks, such as higher rates of maternal mortality than for White women,²⁷ and, for girls, a greater likelihood of school suspensions.²⁸ Moreover, within the workplace, Black women must navigate the intersecting biases of anti-Blackness and sexism. In some cases, this can lead to the premature death of Black women scholars.

Addressing harmful stereotypes calls for systemic antiracist solutions that extend beyond individual psychology. For Black STEM students in higher education, implementing collective measures can pave the way for substantial change. Here are a few strategies to consider:

(1) Recognize and Value Unique Knowledge. Beyond insisting that Black people in STEM serve simply as role models and mentors, we should be highlighting and celebrating the unique insights, perspectives, and applications that Black STEMmbers bring to the table²⁹ by acknowledging their role in enhancing the STEM ecosystem and fostering innovation and progress.³⁰

(2) Expand Research Opportunities. Facilitate research opportunities that allow Black STEM students to explore issues affecting Black communities. This ties STEM education to tangible community advancement and encourages the application of unique knowledge and perspectives.³⁰

(3) Develop Culturally Responsive STEM Curriculum. Advocate for the integration of culturally responsive learning materials within STEM education. This should underscore the significant contribu-

tions made by Black theory builders, inventors, and innovators in the STEM field.³¹

(4) Provide Anti-Racist Workshops and Training. Implement regular anti-racist STEM workshops and training for all students, faculty, and staff. These sessions can illuminate the systemic nature of racism, its impact, and ways to actively counteract it.³²

(5) Foster Inclusive Artistic Expression for STEA²M (Arts and Afrofuturism). Make spaces for creative expression, such as in music, poetry, dance, or visual arts. These mediums can serve as powerful tools for communicating diverse experiences and perspectives, thereby challenging stereotypes.^{32,33} These systemic solutions not only challenge harmful stereotypes, but also recognize and uplift the valuable contributions and unique perspectives Black individuals bring to the STEM field. By doing so, a more inclusive, equitable, and enhanced STEM ecosystem can be fostered.

Absent such solutions, minoritized STEMmbers face chronic stress that produces deleterious physical and mental health effects.³⁴ This includes an increased risk of cardiovascular disease. The weakened immune system makes racially minoritized STEM workers more susceptible to illnesses in addition to mental health problems, such as anxiety, depression, and sleep disturbances.^{26,35,36} These negative physical and mental health outcomes are the product of policies and practices that lead to structural racism against Black people.

Audre Lorde reminds us that self-care is not self-indulgence.³⁷ It is self-preservation; it is also a political act. Self-care may take a capitalistic form (engaging a personal trainer, drinking wine, paying for massages, or getting cosmetic surgery), which, individually, is not as effective or ethical as collective care. Collective care takes the form of collective action, such as holding STEM educators and employers responsible for the environmental degradation of poor communities; supporting Black-owned STEM businesses and efforts toward community building; providing access and opportunities for Black youth to thrive in STEM; and discussing and communicating how policies of governments, corporations, and schools normalize racial violence and the growing resistance and collective activism in the STEM ecosystem.

Ultimately, we can neutralize a toxic STEM environment through critical structural inclusion, addressing equity as a systemic issue, and attention to dismantling anti-Blackness. Black students, scientists, and engineers demand a change in the narrative in STEM and are realizing an Afrofuturist vision. This is necessary and opens a door to possibility—a future where Black STEMmbers not only survive, but also thrive.

Meghan Davis, DVM, MPH, PhD: The Role of the Environment on Mental Health in Higher Education

Mental health challenges are multicausal and multiscale—in the context of institutions of higher education, each university may have its unique drivers. This includes the role of environment, whether the institution relies on traditional classroom and laboratory environments or virtual modalities. Some exposures related to buildings, such as lead (Pb) and carbon dioxide (CO₂), have been linked to mental health outcomes, including cognitive function and performance. Furthermore, physical comfort (eg, ergonomic, visual, thermal, noise) have been associated with productivity measures.^{38–42} Importantly, occupational safety and health strategies to guard against hazardous exposures inadvertently could influence the job tasks and demands of workers, or could impact psychosocial stress, affecting mental health and well-being.

For example, mitigation strategies to reduce laboratory exposures, such as fume hoods and biological safety cabinets as well as the attendant administrative controls related to their use, limit worker autonomy over the performance of job tasks, drive use of personal protective equipment, and generate noise. The design of buildings and the work

done within them can limit well-being in other ways, by constraining activity, challenging comfort, and limiting choice. At the same time, healthier workplace design incorporates elements of biophilia (love of nature), promotes a sense of belonging, and allows for choice and flexibility in use. Such design can include greater use of natural materials (eg, wood, green walls), incorporation of green spaces, inclusion of gathering spaces, and attention to heterogeneous preferences for temperature, noise, brightness, crowding, and other parameters.

The Environmental Domain Panel at the Summit included Dr. Lee Newman, Founding Director of the Center for Health, Work & Environment at the Colorado School of Public Health and Leigh Stringer, Global Director of Advisory Services at Perkins & Will. They promoted a call to action to consider the “wicked” problem of mental health challenges at institutions of higher education as well as architectural design and other interventions to buffer workplace stressors and create inviting environments that promote well-being. Examples from other institutions include use of natural materials or natural analogs, incorporating biophilic design interventions, particularly into high-rise buildings, promoting a sense of belonging through shared spaces, use of sound (such as songbirds of multiple species), inclusion of circulation paths for people who pace, and dashboards or apps to allow users of a building access to information on particulate matter, CO₂, temperature, noise levels, and other parameters to allow more choice based on preferences for work environment.

Leigh Stringer highlighted two buildings using exemplary physical space environments to promote mental health and well-being. The McLeod Tyler Wellness Center at the College of William & Mary in Virginia is an example of biophilic design and flexible space. So too is the Massachusetts Institute for Technology Mixed Use Grad Apartment Tower, which uses design architecture to enhance gatherings and promote feelings of belonging. Stringer noted the location of the McLeod Tyler Wellness Center at the heart of campus, near the famous Crim Dell, the student center, and athletic stadium, as a way to centralize focus on well-being and further demonstrate institutional commitment to health promotion.

CASE STUDIES

Joan M. Troester, MBA: Well-being as a Foundation for the People Strategy at the University of Iowa

The University of Iowa (UI) has been an Association of American Universities (AAU) member since 1909 and a member of the Big 10 Conference since 1899. Located in Iowa City, Iowa, the university includes a world class academic medical center and 11 colleges. Enrollment is approximately 32,000 undergraduate, graduate, and professional students. Approximately 19,000 faculty and staff make up the university's workforce. Since 2006, the university has had in place a comprehensive well-being program for faculty and staff, with renewed interest in well-being as a priority area as stated in the 2022–2027 Strategic Plan.⁴³

Workplace well-being has been a priority for the university for decades. In the past, emphasis was placed on physical fitness and chronic condition management. Today, the focus is more expansive and holistic. As noted in the US Surgeon General's Report on Workplace Mental Health and Well-being⁴⁴ work plays a significant role in everyone's life because they spend about a third of their adult waking hours at work. As such, workplaces can become the “engines of well-being.”

At the heart of well-being is people; supportive individuals who build and sustain a culture of inclusion, belonging, development, safety, and health. UI's strategic plan identifies Holistic Well-being and Success⁴⁵ as one of its five priority areas with an aim of “embedding well-being and mental health into all aspects of campus culture to better support students, faculty and staff.” Key strategies include needs

assessment of diverse campus groups, a framework of inclusive resources, evaluation, and expansion of well-being curricular learning opportunities. Implementation of these strategies is assigned to a multidisciplinary Well-being and Mental Health Collaborative with broad representation from campus stakeholders.

Year one tactics were guided by campus data that identified priorities. Emphasis was placed on publishing a campus well-being inventory, communication and awareness building, and developing an evaluation framework that included key performance indicators measured using a standardized well-being index survey. Accessibility and scalability of services were important for the university's workforce given campus decentralization and 24/7 operations within the medical center.

Two programs focused on improving mental health are provided as examples. *Recharge+* is an online text message service designed to improve individual resilience. The program is based on purpose, mindset, and social connections. Of the 3543 individuals who enrolled in the program in 2022, 53% reported improved resilience. *Kognito At Risk* is an online interactive avatar-based simulation that helps build skill and confidence in learning for students, staff, and faculty in distress. Key areas of learning include recognizing distress, methods of inquiry, knowing about and referring to campus resources, and respecting individual boundaries. Approximately 17,000 students have completed the simulations along with 1700 faculty and staff. Feedback has been positive regarding skill building and improved confidence.

Leaders at UI are continuously working to improve mental health and well-being. They approach this work through collaborative partnerships; leveraging circles of influence within executive leadership, shared governance, and other campus groups; and measuring what makes a difference by collecting qualitative and quantitative feedback from diverse populations across the campus.

Lara Hilton, PhD, MPH: Enhancing Employee Mental Health and Well-being at the Organizational Level

At the University of Southern California (USC), there was a long-standing employee assistance program (EAP) that served faculty and staff for over 40 years. Tumultuous times saw the EAP lose staff, which drove up wait times, prompting leadership to take a closer look at how the mental health and well-being services for faculty and staff was being delivered. Leaders envisioned a USC WorkWell Center with enhancements to a traditional EAP that included work/life and health and well-being programs focused on prevention.

The business case for supporting employee health and well-being was based on research showing that organizations valuing employee mental health and well-being improved workers' health, productivity, and engagement while at the same time reducing costs of health care, disability, workers' compensation, and absenteeism.^{46–48}

The 2022 US Surgeon General's Framework for Mental Health and Well-being⁴⁹ noted that 81% of workers seek employers that support employee mental health. A 2023⁵⁰ headline read: *The Number One Trend in the Future of Work Is Employee Well-being – A Human Imperative*. A June 2023 survey conducted by Deloitte Insights⁵¹ found that over 60% of employees and managers, and 75% of C-Suite executive, were seriously considering quitting their job in search of a position that better supports their well-being.

Being made aware of the above statistics, USC leadership decided to establish a workforce wellness program envisioning the future of work. The first step was benchmarking other higher education institutions,^{52,53} identifying best practices from the business sector, and scanning the scientific literature for effective workplace practices.⁵⁴ From these learnings, USC developed the program that integrated EAP with work-life resources and referrals across all domains of well-being.

This multipronged strategy was baked into the design of the newly minted USC WorkWell Center. The message from leadership was that USC cares about and values the health and well-being of its most important assets—its employees. While the university continued to provide counseling, coaching, consulting, and talks on various psychoeducational topics, it added the newly established health and well-being program that connected employees to benefits and wellness services across campus.

USC's vision was to become a model healthy campus. This would be achieved by collaborating with campus and community partners to create and sustain a campus culture that infuses health and well-being into all policies, practices, systems, and environments. The approach borrowed heavily from the socioecological model promoted by the Centers of Disease Control and Prevention,⁵⁵ The Johns Hopkins POE Total Worker Health Center,⁵⁶ and the University of California's Healthy Campus Network and Initiative.⁵⁷

USC used Stanford's Collective Impact Model⁵⁸ to operationalize the strategy. Key elements include senior leader champions, a backbone of support, and an ecosystem of community partners who drive action plans and disseminate programs.

To operationalize the Healthy Campus strategy, an advisory committee comprised of 45 faculty, staff, and administrators' representatives was formed from the Eco System of Community Partners (ie, schools, units, divisions). Evolving from the advisory committee members were subcommittees formed based on needs assessments and committee input. Subcommittees were tasked with researching best practices, updating strategies, identifying target indicators, and developing an action plan to support the overall strategy. Finally, the programs identified by the subcommittees were deployed by a large team of Healthy Campus/Wellness Ambassadors across USC providing feedback on programs for future programming.

A key component to the collective impact model is measurement. Senior leadership approved a campus-wide survey of employees to measure an overall culture of health. Deployed in Fall 2022, the survey incorporates the following eight key performance indicators:

- Organizational support
- Team support
- Culture change
- Practices/policies
- Environmental factors
- Quality of life
- Belonging/social
- Work outcomes

In the future, and inspired by colleagues at University of Michigan's MHealthy program,⁵⁹ USC would like to create data convergence across siloed data systems held by human resources, health plans, workers' compensation, and disability, to track data related to the following population health and workforce wellness domains:

- Improved health outcomes,
- Increased work productivity,
- Reduced costs, and
- Enhanced employee experience.

A key lesson from the initiative is that leader champions are crucial to reorganization and sustained support. Such support builds buy-in and alignment for USC Healthy Campus with other leaders and university constituents, helps embed well-being in USC practices, policies, and systems, models healthy behaviors, and cultivates a work environment ensuring adequate resources and long-term sustainability.

To maintain ongoing support, leaders need to see value through quick wins. Clear and unwavering vision, mission, and goals need to be articulated with appropriate time frames. Internally and externally gathered data, accumulation of best practices, and incorporating input

from subject matter experts are essential. These are combined with end-user input and feedback. A multilevel organizational approach is preferred where grass root advocates consult with leaders, and eventually meet in the middle. Above all, it is important to be patient, persistent, and positive. Culture change is incremental and a time intensive effort.

Kelcey J. Stratton, PhD: Building Connection and Community: Multilevel Approaches for Mental and Emotional Well-being

The University of Michigan (U-M) is a large public university that employs more than 53,000 faculty and staff. As a major employer in the State of Michigan, U-M has tremendous potential to positively impact the lives of employees and their communities. At the same time, the size and diversity of the organization can also present complex challenges to ensuring outreach and programs that meet the unique needs of faculty and staff at three academic campuses and at the academic medical center, Michigan Medicine.

U-M is committed to supporting the mental health and well-being of all who work and learn at the university. Recognizing that mental health and well-being are not simply matters of individual experience, but rather connected to one's environment, social factors, and policies, U-M expanded efforts in recent years to consider the multilevel approaches necessary to promote workplace well-being. Interventions at the individual, work team, and organizational levels support a holistic model of well-being and contribute to a positive workplace community.

In September 2021, U-M adopted the Okanagan Charter,⁵³ pledging a commitment to take a comprehensive and sustainable approach to becoming a health-promoting university. This commitment included a focus on fostering conditions that improve mental health, providing individual resources, and creating systemic change. A Well-being Collective⁶⁰ consisting of interdisciplinary networks of stakeholders and partners was established to help support and develop an impact framework and create lasting, meaningful action. This framework highlighted opportunities for new initiatives while also promoting long-standing workplace well-being strategies and services. Central to this integrated approach was U-M's philosophy of well-being that conveys a holistic understanding of health, acknowledging eight major well-being components⁶¹ to a healthy life.

Mental and emotional health is embedded in the philosophy of well-being, and this is an important focus area within U-M's strategic priorities for faculty and staff well-being. Data from U-M programs including the internal Employee Assistance Program (EAP) have demonstrated increasing interest in, and utilization of, mental health resources in recent years. Several factors have contributed to this trend: destigmatization of mental health services, the recognition that mental health is a key component of overall health, enhanced awareness about mental health programming, and increased requests for mental health support during and after the COVID-19 pandemic. Indeed, the U-M EAP⁶² has seen significant increases in services; over the past 7 years, clinical services have increased more than 35% and the number of group education and outreach sessions (eg, workshops on mental health topics) has increased approximately 277%. At U-M, the EAP and the broader health and well-being services unit known as MHealthy⁵⁹ are uniquely positioned to effectively support organizational culture, understand the interplay between individual and work factors that impact mental health, and serve as partners to advance practices and policies that support workplace mental health.

Examples of U-M's mental health support strategies include educational offerings and proactive interventions that provide foundational knowledge in mental health topics, build resilience and coping skills, and promote awareness of services. These strategies include workshops and training events for faculty and staff, leadership consultation on workplace mental health concerns, and online toolkits and

resources. To meet needs for early identification of distress, faculty and staff have access to online, anonymous mental health screenings and, at the academic medical center, a peer support program that encourages social-emotional support and connection among colleagues. Supportive and clinical services such as access to EAP counseling and crisis support are available to assist faculty and staff navigate mental health concerns. Together, these offerings provide a continuum of support services that meet diverse individual and organizational needs.

Furthermore, U-M maintains a commitment to addressing the social determinants of health (eg, food insecurity, economic instability) impacting faculty and staff. The Resource Coach program supports faculty and staff experiencing a financial crisis or other personal hardship and connects them to appropriate organizational or community resources. An emergency financial assistance program helps faculty and staff avoid home evictions, utility shutoffs, transportation difficulties, and other financial emergencies. This, in turn, enables employees to continue working and avoid additional negative repercussions. The Resource Coach⁶³ program responded to 879 referrals in 2022, which was nearly double the number of referrals in the previous year. Consistent with a holistic approach, this compassionate program acknowledges the demands and stressors faced by many faculty and staff and connects them with the resources to thrive in both work and personal life.

U-M continues to prioritize workplace mental health and well-being and realize the commitment to becoming a health-promoting university. This endeavor requires coordinated efforts at multiple levels of intervention. Ongoing and future work will include a shared and consistent approach to data collection and evaluation to monitor progress, development of a comprehensive workplace mental health strategy, and continued strong partnerships for collective impact.

Jay Vietas, PhD: Future of Work—Challenges and Opportunities for Worker Well-being

The continued development of types and capabilities of emerging technologies, along with their adoption in the workplace are changing how work is performed, the definition of workplace and work delivery, and is causing increased pressure on an already changing and aging workforce.⁶⁴ The National Institute for Occupational Safety and Health is studying the convergence of these concepts as part of their Future of Work Initiative⁶⁵ and has developed a research agenda to systematically learn about how they make impact the workplace of the future and to develop recommendations on how best to ensure worker safety, health, and well-being.⁶⁶

Technologies such as artificial intelligence (AI), augmented reality, additive robotics, smart sensors, and wearable technology, combined with advances in materials, biotechnology and big data analytics are fueling innovations which hold great promise in increasing productivity and efficiency, and provide opportunities and challenges for worker safety, health, and well-being.

A closer examination of one of these technologies, AI, and the impact on worker safety, health, and well-being illustrates the multifaceted nature of this innovation. AI can automate repetitive and hazardous tasks, reducing the need for workers to engage in high-risk work. Additionally, AI can be utilized for advanced risk assessments, improve situational awareness to reduce accidents, and through the use of computer vision and other technological tools, can monitor the proper usage of personal protective equipment. However, there are potential unintended consequences associated with the adoption of AI. These include the potential for out-of-control safety incidents, biased outcomes for workforce members involved, and concerns over job displacement along with changes in tasks performed by workers. These tools can also be used to monitor the activities and performance of workers creating concerns for the loss of worker autonomy, along with ethical and privacy issues.

Occupational safety and health professionals are encouraged to actively be aware of the introduction of technologies into the work-

place, such as AI, and to proactively address anticipated challenges to protect workers in the evolving workplace. Partnering with management, operators, and software designers to create tools and processes that have the human, or in this case, the worker, in mind. This philosophy incorporates elements of *Total Worker Health (TWH)* and *Prevention through Design (PtD)*, both of which may be used to address worker safety, health, and well-being issues related to the use of emerging technologies.

The National Institute for Occupational Safety and Health's TWH approach integrates policies and practices at an organizational level to create a culture of worker safety, health, and well-being.⁶⁷ Addressing challenges associated with the implementation of emerging technologies, such as the blurring of work-life boundaries, the need for workers to continue to upskill and reskill, along with the potential opportunities to collect performance data can give rise to psychosocial hazards, making mental health an important focus area for occupational safety and health.

PtD seeks to improve worker safety and health by creating an inherently healthy work environment that reduces the need for reactive health and safety interventions. PtD represents a philosophy and methodology of preventing hazards from entering the workplace during the earliest stages of project development by identifying potential hazards using a multidisciplinary approach.⁶⁸

While emerging technologies provide unprecedented opportunities, they also pose significant challenges for worker safety, health, and well-being. Proactive risk management through the use of Total Worker Health and Prevention through Design are necessary ingredients for a future where workers can thrive in a safe and healthy work environment.

DISCUSSION

Improving the mental health and well-being of workers employed at HEIs is serious business and may feel all-consuming and not easily solvable. It is clear that the long-term effects of the global crisis ignited by the COVID-19 pandemic has exerted a detrimental effect on many workforces, including faculty and staff at HEIs. However, HEIs also afford advantages in comparison to other workplaces in that they provide employees a sense of purpose and meaning for their labor, access to smart people who are curious and willing to share their insights, and a social environment that fosters a sense of belonging and connectedness.

At the June 2023 Summit, thoughtful individuals were brought together to openly discuss the stressors imposed on employees at HEIs made worse by COVID-19. While the initial focus of the Summit was highlighting the many stressors affecting staff and faculty within the many layers of HEI infrastructures, it also emphasized the importance of protective actions that exert positive influences on employee health that need to be tested using open scientific methods that evaluate programs, policies, and environmental supports designed to enhance workers' mental health and well-being.

A key theme emerging from the Summit was that mental health and well-being are not just the responsibility of those workers affected. It is a shared responsibility for all constituents in the HEI community who need to align across psychosocial, organizational, and environmental domains to support the individuals affected. For example, EAPs have been effectively used by the education industry to support the individual health and well-being of its workforce in reducing mental health clinical symptoms and improving work-related outcomes.⁶⁹ Research has shown EAP programs are being better integrated into the overall organizational approach to employee health and well-being,^{70–72} and as demonstrated by the comprehensive best practice strategies described above by the U-M and USC case studies, to enhance their effectiveness.

Furthermore, a repeated message throughout the Summit was the importance of commitment and accountability—resting on the

shoulders of leaders at all levels of an organization to support a culture of caring and do so by leading by example. Leaders, regardless of their title, have the power and authority to move cultures in positive directions, through their words and deeds. As we look to the future of work, we must keep in mind the benefits and challenges innovative new technologies such as AI have to offer to worker safety, mental health and well-being within a Total Worker Health paradigm.

CONCLUSIONS

It is no secret that many who work in higher education are struggling with increased workloads and a deteriorating work-life balance. The COVID-19 pandemic put a fine point on these stressors, with a Chronicle of Higher Education survey⁷³ showing that in the pandemic's aftermath, more than half of faculty considered retiring or changing careers. But while the pandemic exacerbated many workplace issues, it also showed us that HEIs can make fundamental shifts in their policies and practices—and the time to do so is now.

At the Summit, in addition to discussing best practices and evidence gaps, we focused on solutions to address the tremendous pressures facing the higher education workforce. With experts from around the nation, we discussed these issues with honesty and candor. Together, we explored exciting ideas and cultural and structural changes we can make. It is our intention to share these innovative strategies for implementing lasting and meaningful change in HEIs.

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