Advancing a Healthier Wisconsin Endowment

ANNUAL REPORT 2022

For the period of July 1, 2021 – June 30, 2022



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Medical College of Wi

ABOUT AHW

We empower Wisconsin's communities, scientists, health professionals and learners to make positive change possible.

The Advancing a Healthier Wisconsin Endowment is Wisconsin's largest health improvement philanthropy. We are investing in promising biomedical research, supporting community health initiatives, and building the health workforce needed in Wisconsin.

Advancing a Healthier Wisconsin (AHW) is part of the Medical College of Wisconsin, the third-largest private medical school in the nation. AHW is the only health philanthropy in the nation stewarding public funds while embedded in a private medical school.

In 1999, Blue Cross & Blue Shield United of Wisconsin converted from a nonprofit to a forprofit corporation. The Medical College of Wisconsin received half of the funds resulting from the conversion, with the other half going to UW-Madison's School of Medicine and Public Health. Leveraging the generous gift to serve as a resource for health improvement efforts across Wisconsin, AHW issued its first funding awards in 2004, building momentum and increasing its impact on the state's health ever since.



Working with our partners, AHW will serve as a catalyst for positive change in the health of Wisconsin communities.

OUR **VISION**:

Advancing Wisconsin to be the healthiest state in the nation.



"We have made deliberate investments in building the capacity and skills of our partners across the state, all aimed at enabling others to achieve our shared mission: improving the health for people in every corner of the state."

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Dr. Jesse Ehrenfeld - AHW Director



A MESSAGE FROM The Director

Wisconsin neighbors and friends,

On behalf of the Medical College of Wisconsin (MCW) and the MCW Consortium on Public and Community Health (the Consortium), I am honored to share the data and reflections contained in this fiscal year 2022 annual report, which reflect our ongoing commitment to providing the highest levels of stewardship of the funds administered by the Advancing a Healthier Wisconsin Endowment.

Not only does this publication allow us to chart and share our progress against AHW's 2019-2023 five-year plan, but it also affords us an opportunity to acknowledge and thank the partners and stakeholders whose work has helped advance our mission of creating positive change in the health of Wisconsin communities, while marking key milestones in our progress toward maximizing the health of all Wisconsinites.

In the period reflected in this report, AHW invested more than \$25 million in 26 new projects devoted to improving health and achieving health equity throughout the state. In total, AHW funding supported 95 active projects in fiscal year 2022, representing more than \$113 million in ongoing commitments all directed toward initiatives benefitting people and communities across Wisconsin.

With COVID-19 continuing to disrupt life and health care systems, both globally and here in Wisconsin, AHW has and will continue to adapt its policies and practices as necessary to meet our partners where they are, supporting grantees and applicants in new ways that acknowledge and address ongoing pandemic challenges.

With the advent of fiscal year 2023, AHW welcomes four new members to our Research and Education Advisory Committee, and I am excited to add to this oversight body the perspectives of these respected MCW representatives, each of whom brings valuable expertise to the group: Shelisa Dalton, MBA, Chief Financial Officer; José Franco, MD, MPH, Senior Associate Dean for Education, School of Medicine; John Mantsch, PhD, Chair and Florence Williams Professor of Pharmacology and Toxicology; and Amy Prunuske, PhD, Associate Professor, Department of Medical School Regional Campuses.

We have also expanded our staff over the past year to better serve our partners and more effectively and efficiently fulfill core functions in fulfillment of our mission, hiring Ugwuji Maduekwe, MD, MMSc, MPH, to serve as deputy director. Dr. Maduekwe has already made impressive strides in supporting AHW's ongoing efforts to address health disparities across Wisconsin and contributed meaningfully to our focus areas of heart health, mental and behavioral health, and cancer. AHW also engaged a philanthropy fellow and data analyst and added new capabilities to our communications team in order to better position us to broaden our reach and enhance our understanding of our stakeholders' needs.

The transition from fiscal year 2022 to 2023 marks a pivotal period in AHW's longterm planning, kicking off the process for developing our next (2024-2028) five-year plan. We are approaching this responsibility as stewards of this public resource with due consideration of the long-standing and emergent health challenges confronting Wisconsin. We recognize that many of the health indicators we use to gauge the collective health of the people we serve have taken a negative turn over the course of an extended public health emergency. We look forward to engaging with the many individuals and organizations throughout the state who share our dedication to the health and well-being of their families, friends and communities as we chart the next phase of our shared journey toward a healthier Wisconsin.

Sincerely,

Jesse M. Ehrenfeld, MD, MPH, FASA, FAMIA Senior Associate Dean and Director Advancing a Healthier Wisconsin Endowment Professor, Anesthesiology

Medical College of Wisconsin



Year in Review July 1, 2021 – June 30, 2022

At AHW, we are driven by a vision of a healthier Wisconsin. Since issuing our first funding awards in 2004, we have, as of June 2022, invested more than \$313 million into 533 projects, supporting research and programs aimed at improving lives, building the state's health care workforce, and creating community partnerships dedicated to positive health outcomes.

This period includes a portion of the third full year of our 2019-2023 five-year plan, extending our commitment to support promising work and ideas across four funding pathways while maintaining a focus on the state's health equity gaps and addressing emerging health challenges.

Investment highlights from fiscal year 2022 include:

- A partnership with the National Academy of Medicine for the NAM Fellowship to Advance State Policy that raises the visibility of Wisconsin's public health initiatives nationally while providing the opportunity for a Wisconsin-based public health scholar to experience and participate in evidence-based health care or public health studies that improve the care and access to care of patients
- An investment of \$359,173 in a project to evaluate communications strategies aimed at reducing veteran suicide and increasing firearm safety behaviors, building upon a long-standing commitment to veteran health and well-being, as demonstrated by Dr. Ehrenfeld's appointment to the Wisconsin Department of Veteran Affairs Blue Ribbon Commission on Veteran Opportunity
- The award of \$521,536 to a project led by the Children's Health Alliance of Wisconsin to reduce health inequity through the implementation of the Pediatric Readiness Program for Community Emergency Departments in 20 emergency departments statewide
- An award of \$1.5 million, matched by the UW School of Medicine and Public Health, to conduct statewide monitoring of health disparities, including the impact of COVID-19, and examining the impact of initiatives on improving health and reducing health disparities



Total New Investments

Fiscal Year 2022

- Basic, Clinical and Translational Research: \$15,374,940
- Education and Workforce Development: \$2,455,047
- Policy and Systems Change: \$972,530
 - Population and Community Health: \$6,595,061

In addition to these distinct financial investments, AHW helped its partners increase their effectiveness and reach with capacity-building programs, including:

- Providing access to pro bono services through Catchafire, a national organization matching skills-based virtual volunteers with nonprofit entities, to AHW partners to strengthen their work and increase impact
- Enhancing support for community-based organizations, community coalitions, and community-academic partnerships through AHW's Technical Assistance Provider Program, connecting top-notch organizations and individuals to AHW-funded projects, bringing their content expertise and experience to support each project's specific needs, barriers, or challenges in order to build the capacity of their coalitions and collaborations and drive toward successful outcomes
- Planning, organizing, and hosting Grantee Learning Events which provide space for funded partners to congregate, learn from each other, share project successes, discuss common barriers, and explore opportunities to take project efforts further, including via collaboration.

FISCAL YEAR 2022 BY THE NUMBERS

\$25,397,578 in new funding

26 New Projects

95 active projects representing **\$113,242,342** in funding

31 projects closed

COVID-19 RESPONSE



PROJECT HIGHLIGHT

Building COVID-19 Vaccine Confidence through a Health Equity Lens

\$230,000 | Award Period: 5/1/2021 - 10/31/2021

On December 14, 2020, the first doses of the COVID-19 vaccine were administered in Wisconsin. Almost one year later, more than 7.5 million doses have made it into the arms of Wisconsin residents, with approximately 59% of the population having received at least one dose.

Yet as COVID-19 vaccinations increased, a concerning statistic began to surface: Vaccination rates in Black and Hispanic/LatinX communities lagged rates in White communities by more than 25%. As community organizations and health officials mobilized a response, an active coalition stepped forward in Milwaukee County, Wisconsin's most populated and diverse county.

With the support of a \$230,000 AHW grant, along with additional public and private funding, this collaborative team of community- and Medical College of Wisconsin-based leaders have worked to increase access to COVID-19 vaccines in high-vulnerability Milwaukee County ZIP codes through an approach that is aimed at building trust today and long into the future.

Their approach began with data. Utilizing a model called the Evaluating Vulnerability and Equity (EVE) Model developed by Dr. Ben Weston, associate professor of Emergency Medicine at the Medical College of Wisconsin and the chief health policy advisor of Milwaukee County, project partners were able to identify and target communities with low vaccine uptake, coupled with high vulnerability.

The coalition then began a targeted approach, with community-based organizations Jump at the Sun Consultants, INPOWER Solutions, and 2-Story Creative partnering to deploy targeted messages and trusted community mobilizers into neighborhoods on a weekly basis.

A messaging campaign, called Authentic Voices, was enhanced to feature community members from the impacted Milwaukee neighborhoods telling their stories of resilience and why they chose to get vaccinated. Shared across a variety of media platforms, the messages resulted in a reach of more than 300 million impressions in just six months.

"The Authentic Voices campaign was unique in that it engaged community members throughout the entire process from inception to implementation, enabling us to truly personalize the messaging across each creative execution," said Aziz Abdullah, co-founder of INPOWER Solutions and one of the leaders of the campaign. "Many individuals had varying sentiments, attitudes, and emotions around the COVID-19 COVID-19 maintained a stubborn presence in Wisconsin over the period covered in this report, with a seasonal surge of cases and hospitalizations in late 2021 that mirrored the spike in disease spread seen one year earlier. Throughout the pandemic and to this day, AHW has remained committed to fighting COVID-19 while supporting the operational adjustments our partners needed to make as they persevere through the ongoing health emergency.

COVID-19 challenged us not only to respond to an immediate health crisis and its effect on individuals, communities, and public health systems throughout the state, but also to think strategically about strengthening our networks and increasing the efficiency and effectiveness of future interventions, particularly with regards to underrepresented populations.

Our sustained COVID-19 support and recovery efforts have been focused on critical needs, with significant resources dedicated to vaccinating underserved communities.

COMPLETED PROJECTS:

- Building COVID-19 Vaccine
 Confidence Through an
 Equity Lens
- The Effectiveness of
 Personal Protective
 Equipment (PPE) Across
 Wisconsin Nursing Homes
- Presence of SARS-CoV-2 in Stool of COVID-19 Cases: Potential for Transmission Via Stool Shedding

vaccine, therefore it was essential for our workgroup to build consistency while remaining flexible to the uniqueness of each person and community."

In addition to this comprehensive communications strategy, a team of community members, most of whom were from the targeted census tracts, were trained to canvass neighborhoods, partnering with public health teams to go door-to-door, talk to residents about vaccines, answer their questions, and offer vaccines to those who were ready. This community-centered approach was aimed at building trust, creating goodwill between both community mobilizers and vaccinators and between mobilizers and community members.

"Meeting people where they are and providing information in a non-judgmental manner from trusted sources, has been essential to our journey. We continue to learn and grow and are grateful to the many and strong partnerships that have contributed to our early successes," said Lorraine Lathen, president of Jump at the Sun Consultants and director of the COVID-19 Community Mobilizer Team.

The coalition's data-driven, human-centered model has delivered results: 150 individuals were trained as community mobilizers, 65 census tracts covered, 23,651 homes visited, 746 vaccines administered, and over 31,000 text messages and 35,000 pieces of COVID-19 vaccine information disseminated to residents in low-vaccinated communities, helping to deliver accurate information and protect individuals, families, and the entire community as the COVID-19 pandemic continues.

While the data continue to be monitored and evaluated, the coalition is sharing the lessons it has learned for future public health planning and partnership development.

"AHW funding was essential to help build vaccine confidence in a culturally sensitive and authentic reflection of voices in socially vulnerable communities," added Mara Lord, senior vice president of university engagement and strategic planning at MCW and a collaborator on the project. "It also enabled us to ensure an equity lens was used for every aspect of this project, from selection of partners, to focus group testing, to deployment of messaging and community mobilizers."

Collaborations such as this one demonstrate that using an equity lens throughout the entire process is a critical building block for the future.

"This model could be scaled to enhance equity and promote other positive health behaviors such as medication adherence, blood sugar management, and reducing smoking," said Dr. Weston. "Additionally, this model could serve as a bridge to overcome medical mistrust, building relationships at the neighborhood level with individuals from the community who serve as health advocates and liaisons to more complex health infrastructure."

PATHWAYS FOR PARTNERS

AHW funding propels the most promising work and ideas forward along four pathways that lead to a healthier Wisconsin, supporting health innovators, collaborators, and problem-solvers across the state to develop and implement solutions to our most pressing health challenges.

In fiscal year 2022, AHW advanced and extended strategies codified in our 2019-2023 fiveyear plan, investing in projects that will improve the health of Wisconsinites today, and for generations to come.



Basic, Clinical, and Translational Research

Driving research discoveries by advancing the work of biomedical researchers to translate research from the lab bench to patient bedside to community and back, creating the new knowledge necessary to address Wisconsin's health

Education and Workforce Development

Transforming the landscape of the health research, health care, and community and public health workforce by supporting efforts that develop and grow a workforce that is poised to meet the diverse and evolving needs of Wisconsin residents now and for generations to come.

Population and Community Health

Moving findings to action by facilitating the creation of actionable knowledge needed to inform effective programs, policies, and practices that can address the root causes of poor health outcomes in Wisconsin.



Policy, Systems, and Culture Change

Weaving good health for all into the fabric of communities by enabling partners to challenge and change the complex policies and systems that will make good health practical and available to all across Wisconsin.





BASIC, CLINICAL, AND TRANSLATIONAL RESEARCH

AHW's Basic, Clinical, and Translational Research pathway focuses on increasing discovery, accelerating the translation and dissemination of new knowledge, and developing effective and sustainable biomedical research.

COMPLETED PROJECTS

- The Role of LLGL1 in Cardiac Development and Regeneration
- Optimizing Functional Outcomes of Stroke Survivors through Translational Research
- The Cardiovascular Roadmap: Bridging our Foundations to "Signature Programs"
- Innovative Approaches to Precision Medicine (IAPM)
- CTSI Mentored Clinical and Translational Research Training Program (KL2) & Pilot Collaborative Clinical and Translational Research Grants Program (PCCTRP)
- Underlying TBI: Identifying Molecular Mechanisms Underlying Traumatic Brain Injury
- BCG Boosted CAR-T Cell Therapy to Treat Bladder Cancer

Find a summary of each closed project at ahwendowment.org/fundedprojects

NEW INVESTMENTS

PROJECT NAME & AWARD	PROJECT AIM	PRINCIPAL INVESTIGATORS
Development of a Surgical Oncology Disparities Research Program	Investigating the mechanisms underlying surgical oncology disparities at the population and epigenetic levels to inform effective interventions aimed at closing the gap	Callisia Clarke, MD, MCW Department of Surgery
\$1,091,200		
5/1/2022 - 4/30/2026		
Regulation of the Small GTPase Prenylome by SmgGDS During Neuronal Development	Testing a new strategy to diminish developmental and degenerative brain disorders by targeting proteins known as small GTPases	Carol Williams, PhD, MCW Department of Pharmacology and Toxicology
\$250,000		
7/1/2021 - 6/30/2023		
Plasma Factors in Patients with Sickle Cell Disease Sensitize Nociceptors to Drive Pain	Investigating the causes of sickle cell disease using human tissues and state-of- the-art approaches	Cheryl Stucky, PhD, MCW Department of Cell Biology, Neurobiology and
\$250,000		Anatomy
7/1/2021 - 6/30/2023		
Molecular Pathogenesis of Common Variable Immunodeficiency	Providing novel insights into the molecular pathogenesis of human Common Variable Immunodeficiency to help identify novel target therapeutics for the disease	Demin Wang, PhD, MCW Department of Microbiology and Immunology
\$300,000		
7/1/2021 - 6/30/2023		

\$15.4 MILLION FUNDED IN FY22

The Lung-Brain Axis in Breathing Control in a Mouse Model of COPD \$500,003 2/1/2022 - 1/31/2027	Increasing understanding of how and why the neural control of breathing is impaired in patients with chronic obstructive pulmonary disease (COPD)	Gary Mouradian, PhD, MCW Department of Physiology
Pediatric Lung Research Program to Optimize the Respiratory Health of Children in Wisconsin	Identifying causes and developing new therapies and outreach strategies to improve the respiratory health of	Girija Konduri, MD, MCW Department of Pediatrics
\$1,500,000	Wisconsin children	
10/1/2021 - 9/30/2026		
Integrated Program in Immuno-Oncology	Developing an innovative and	Gustavo Leone, PhD,
\$5,600,000	transformative translational clinical and preclinical research program in immune	MCW Cancer Center
	therapy	
7/1/2021 - 6/30/2028		
Enhancing Neural Plasticity for Recovery from Aphasia	Integrating advanced brain stimulation techniques with new therapy methods to boost language ability and quality-of-life in	Jeffrey Binder, MD, MCW Department of
\$283,737	people with aphasia	Neurology
7/1/2021 - 6/30/2024		
The Origin and Europhian of October Accession i		Queteus La sura DED
The Origin and Function of Cancer Associated Fibroblasts in Pancreatic Cancer	Developing a multidisciplinary program project to evaluate the pancreatic cancer	Gustavo Leone, PhD, MCW Cancer Center
\$3,100,000	microenvironment	
7/1/2021 - 6/30/2026		
lyengar Yoga as a Probe of Prolonged Grief Disorder Neurobiology	Using Iyengar Yoga (IY) as a probe to reveal prolonged grief disorder	Joseph Goveas, MD, MCW Department
\$250,000	neurobiology and testing IY as an intervention that may aid in the clinical	of Psychiatry and Behavioral Medicine
	recovery of older adults affected by the	Denavioral medicine
7/1/2021 - 6/30/2023	disorder	
The Human Holobiont: Enhancing Health and Preventing Disease	Determining how host factors shape microbial colonization in humans and why	Nita Salzman, MD, PhD, MCW
\$1,500,000	disrupting this process creates disease susceptibility	Department of Pediatrics
7/1/2021 - 6/30/2026		
Polo of the Brain Bonin Angietancia System in	Evaloring how microglic and	Doble Nekssowa DhD
Role of the Brain Renin Angiotensin System in Neuroinflammation	Exploring how microglia and neuroinflammation can accelerate	Pablo Nakagawa, PhD, MCW Department of
\$500,000	hypertension and neurodegenerative diseases	Physiology
2/1/2022 - 1/31/2026		
Defining the Cardiometabolic Profile of Transgender Boys and Men on Testosterone Therapy	Creating a better understanding of the effects of gender-affirming testosterone care on the cardiovascular and metabolic health of transgonder men and here.	Susanne Cabrera, MD, MCW Department of Pediatrics
\$250,000	health of transgender men and boys	
7/1/2021 - 6/30/2024		

PROJECT HIGHLIGHT:

Enhancing Neural Plasticity for Recovery from Aphasia

\$283,737 | Award Period: 7/1/2021 - 6/30/2024

A mild electrical current that painlessly alters brain cell communication while patients do language exercises may help them recover from aphasia, a disorder that occurs when a stroke or brain injury damages parts of the brain responsible for language, a research project supported by the Advancing a Healthier Wisconsin (AHW) Endowment suggests.

Stroke is the largest contributor to disability among neurological and psychiatric disorders. However, there is limited evidence about how to improve language recovery among the 30% of stroke survivors whose daily lives are devastated by aphasia, say researchers from Medical College of Wisconsin (MCW) and University of Wisconsin-Milwaukee (UWM) involved in a \$283,737, three-year AHW project that started in July 2021.

Aphasia impairs the ability to speak, read, write, and understand what others say because of damage typically to the left side of the brain. About 1 in 250 people in the U.S. currently have aphasia – roughly 2 million total – and nearly 180,000 Americans acquire it each year, according to the National Aphasia Association.

Tremendous changes in the brain following a brain injury help the brain recover in the first six months, but for the roughly 20% of stroke survivors who don't recapture full language and communication abilities, more effective rehabilitation methods are needed, researchers agree.

"It is a prevalent problem that is not adequately researched or funded by NIH because of low public awareness and advocacy for it," said the AHW project's principal investigator, Dr. Jeffrey Binder, a professor of neurology at MCW and clinical neurologist who specializes in stroke diagnosis and management.

The AHW-supported, double-blind, randomized clinical trial enrolling 40 patients over three years is expected to provide the first detailed, large-scale assessment of a combination of the most advanced method of tDCS (transcranial Direct Current Stimulation) and two process-specific language exercises.

The noninvasive tDCS sends a mild electrical current through the scalp to brain tissue. The current subtly alters electrical communication between brain cells, or neurons, responsible for the brain's ability to learn. When tDCS is given at the same time a patient tries to learn something new through language exercises, researchers believe neurons may form new connections more quickly.

The first language exercise in combination with tDCS focuses on retrieving what patients know about the sounds of a word they are trying to say (beginning and ending sounds, number of syllables, similar sounding words). The second exercise focuses on what they can retrieve about meaning of the word (appearance, location, or function of the object to which the word refers).

The project brings together experts in stroke, aphasia, human brain language networks, advanced



brain imaging, and noninvasive brain stimulation methods. In addition to Dr. Binder, the team includes co-investigators Dr. Sara Pillay and Dr. Priyanka Shah-Basak, both assistant professors of Neurology at MCW, and Dr. Sabine Heuer, an associate professor of communication sciences and disorders at UWM, as well as Dr. Aniko Szabo, an MCW biostatistician. "While the study is in its early phase, preliminary data show lasting changes in functional connectivity – how much different brain areas communicate with each other – months after the electrical stimulation and language exercises," Dr. Binder said. Brain MRIs are done before treatment and then 10 weeks after treatment.

"No existing, published studies combine tDCS with the two process-specific language exercises in this study," Binder said.

"So far, we have seen proof of concept, showing promise," said Dr. Shah-Basak of MCW, who also is a biomedical engineer with expertise in electrical brain stimulation.

The team is using basic science knowledge about language networks in the brain to develop treatment protocols, and state-of-the-art neuroscience imaging that targets specific brain regions that are part of the language network. Multiple regions of the brain try to relearn or function after a stroke. One may interfere with another that contributes to recovery, so pinpointing the contributing region with electrical current is the goal. Individual brain anatomy also varies, and researchers can scan each participant's brain to individualize the area targeted for stimulation, said Dr. Pillay.

"Not everyone's brain is the same shape," Dr. Pillay said. "The lesion – the area damaged by the stroke – may be different."

"Electrical brain stimulation currently is not part of the standard of care for stroke survivors, and generally is not covered by insurance. But we hope that demonstrating benefits of intensive programs with targeted therapies will change that," Dr. Binder said.



EDUCATION & WORKFORCE DEVELOPMENT

AHW's Education and Workforce Development pathway focuses on developing and growing a health workforce that is increasingly accessible, equipped, and representative of the diversity of the community it serves.

NEW INVESTMENTS

CLOSED PROJECTS

- Planning for the Wisconsin Alcohol Policy Project
- Student Leadership Development Initiative

Find a listing of each closed project with a summary of outcomes at ahwendowment.org/fundedprojects

PROJECT NAME & AWARD	PROJECT AIM	PRINCIPAL INVESTIGATORS AND PRIMARY COMMUNITY ORGANIZATION
Integration of CHWs into Public Health Initiatives for Rural and Urban Communities \$514,905 7/1/2021 – 6/30/2024	Increasing the number of community members trained and deployed as community health workers via transformation of the Milwaukee Area Health Education Center in-person training format into a virtual platform to reach rural and urban communities	Leslie Ruffalo, PhD, MS, MCW Department of Family Medicine Milwaukee Area Health Education Center
Milwaukee Healthcare Workforce Initiative (MHWI) \$500,000 7/1/2021 - 6/30/2024	Creating a focused, employer-led, demand-driven training program to develop a diverse, qualified candidate pool for health care systems across the Milwaukee area	C. Greer Jordan, PhD, MBA, MCW Institute for Health and Equity Employ Milwuakee
Pediatric Readiness Program for Community Emergency Departments (Pediatric Readiness) \$521,536 7/1/2021 - 6/30/2025	Reducing health inequity through implementation of the Pediatric Readiness Program for Community Emergency Departments in 20 emergency departments	Lorin Browne, DO, MCW Department of Pediatrics Children's Health Alliance of Wisconsin
Dismantling Cancer through the Community Health Worker Workforce \$415,147 7/1/2021 – 6/30/2023	Increasing access to evidence-based, standardized training and tools to prevent and detect early cancer in communities of color in Wisconsin	Jamila Kwarteng, PhD, MCW Institute for Health Equity UniteWI
Student Champions: Connecting Dementia Patients/Caregivers to Essential Community Resources \$503,459 7/1/2021 - 6/30/2024	Connecting dementia patients/ caregivers with community resources to decrease inequity in access to disease-appropriate health care and reduce caregiver burden	Kathryn Denson, MD, MCW Department of Medicine Marquette University

\$2.5 MILLION FUNDED IN FY22



PROJECT HIGHLIGHT:

Doctorate in Public Health Program

\$702,478 | Award Period: 2/1/2020 - 6/30/2024

A new Doctorate in Public Health (DrPH) program at the Medical College of Wisconsin (MCW) is training innovative leaders to translate and integrate public health research into initiatives, programs, and policies across government, nonprofits, community health, and healthcare. The DrPH is also a connector between public health and clinical medicine with its focus on addressing structural racism and disinvestment in communities, and social determinants of health, such as food security and safe, stable housing.

MCW leaders had been discussing the need for a DrPH program for five years before the Advancing a Healthier Wisconsin Endowment (AHW) moved it forward. With a \$702,478 grant awarded in early 2020, MCW began work to develop the infrastructure for the program so that it can be sustained and continue to train cadres of new public health leaders long into the future.

MCW created the program because advanced skills in public health practice and community engagement are required to lead a community or specific population toward improved health through a health equity lens. As community-based "chief health strategists," graduates of the DrPH program will be equipped to collaborate with diverse partners, synthesize knowledge, and generate practice-based evidence, according to the MCW team that developed the program through an AHW grant.

"This is a program for working professionals in a variety of fields," said Terry Brandenburg, director of the Master of Public Health program at MCW at the time of the award. "It is interdisciplinary in public health practice."

"We're grateful AHW funding allowed us to rapidly move forward," Brandenburg said.

The DrPH is one of nine MCW degree programs launched with support from the Advancing a Healthier Wisconsin Endowment. Six of those programs — including the two MCW regional campuses in Green Bay and Central Wisconsin — have graduated nearly 500 new health and science leaders. Three programs are in development, or like the DrPH, recently welcomed inaugural classes.

Few schools across the country offer the DrPH in a similar online, distance-based format, noted Kim Contardi, program manager of MCW's Institute for Health and Equity. Nationally, placement in the DrPH program is highly competitive with small cohorts, and application acceptance rates of around 10%.

The CEPH-accredited program's online format is designed for mid-career professionals who aspire to work collaboratively across sectors to address the complexities of public, population, or community health. The DrPH is the highest professional degree in public health practice, and MCW is the only school in Wisconsin that offers it.

The MCW DrPH program offers both asynchronous and synchronous learning, including three summer visits to the MCW campus in Milwaukee.



Comprised of 46 credits, including 10 for dissertation, the DrPH is designed as a three-year program, but can be completed in up to five years. Training incorporates competencies in data and analysis; leadership, management and governance; policy and programs; and education and workforce development. Each student has a faculty member mentor, based on common interests.

The first cohort of 11 working professionals, including six from Wisconsin, began their online studies in the fall of 2021.

The program's first students work in both public and private areas of public health and healthcare. One student is in government public health. Another is director of operations for a Boys and Girls Club. The program is launching amid a global pandemic that illustrates the need for cross-sector, interdisciplinary problem-solving skills.

"The pandemic has shone a light on not only the issues of the virus, but the corresponding issues related to healthcare access, front line workers, and who is likeliest to catch it — issues connected to the health of the community," said David Nelson, an associate professor of family and community medicine who leads many of MCW's community engagement efforts and directs the DrPH program.

While Wisconsin has seen "incredible leadership in public health, particularly in this past year," the future of public health relies on the next generation of leaders, said Jesse Ehrenfeld, MCW senior associate dean and director of the Advancing a Healthier Wisconsin Endowment at MCW.

As a biostatistician, DrPH student Carlos Litovich wants to complement his research-forward background with leadership and community engagement skills. Litovich is a program manager at the Center for International Blood and Marrow Transplant Research, a collaboration of MCW and the National Marrow Donor Program/Be the Match.

Fellow MCW DrPH student Kelli Brown hopes the focus on applied practice in leadership, and a deeper knowledge in public health, will prepare her to be a leader in public health education. Brown is the education program coordinator for MCW's Master of Science in Global Health Equity program.

"Training future public health professionals who think of innovative solutions and can collaborate across sectors is how I hope to advance the health of Wisconsin residents," Brown said.



POPULATION & COMMUNITY HEALTH STUDIES

AHW's Population and Community Health Studies pathway focuses on establishing evidence and building resources that can inform programs, policies, and practices to advance health equity in Wisconsin.

CLOSED PROJECTS

- HWPP Strategic Phase II MCW Partner Team
- Advancing Access to Improved Mental Health in Rural Southwestern Wisconsin
- Better Together
- Building a Behavioral Health System to Reduce Reported Depression Among 6th-12th Grade Students
- Creating Mental Wellness through Systems Change
- Enhancing Behavioral Health in Northern Wisconsin through Innovative Collaboration
 and Outreach
- Healthier Community Action Team Behavioral Health Project
- Healthy Teen Minds
- Improving Children's Mental Health through School and Community Partnerships
- Mental Health Matters: Promoting Resilience for Chippewa Valley Youth
- Milwaukee School, Home, and Community Collaboration to Improve Youth Mental Health
- Building COVID-19 Vaccine Confidence Through an Equity Lens
- Best Practices for Smoking Cessation for Milwaukee Public Housing Residents

Find a listing of each closed project with a summary of outcomes at ahwendowment.org/ fundedprojects

NEW INVESTMENTS

PROJECT NAME & AWARD

Collaborative Work Groups to Reduce Wisconsin's Breast and Lung Cancer Disparities: Phase One

\$2,133,856 (Population and Community Health Funding)

\$1,449,428 (Research Funding)

7/1/2021 - 6/30/2023

PROJECT AIM

Creating multi-sector collaborative work groups across Wisconsin to develop a transdisciplinary understanding of a topic associated with breast and/or lung cancer disparities and designing an integrated solution

PRINCIPAL INVESTIGATORS OR PRIMARY COMMUNITY ORGANIZATION

Staci Young, PhD, MCW Department of Family Medicine

Center for Urban Population Health

\$6.6 MILLION FUNDED IN FY22

PROJECT NAME & AWARD	PROJECT AIM	PRINCIPAL INVESTIGATORS OR PRIMARY COMMUNITY ORGANIZATION
Increasing Integrated Behavioral Health in Primary Care Settings through Team Training	A multi-sector partnership with 5-10 Wisconsin health systems increasing integrated behavioral health in primary care	Katinka Hooyer, PhD, MCW Department of Family Medicine
\$367,650 7/1/2021 - 6/30/2024		Wisconsin Collaborative for Healthcare Quality
Effect of Mass Communication on Veteran Suicide Prevention: Help Seeking and Firearm Safety Behaviors	Evaluating whether statewide societal mass communications influence veterans' help-seeking behavior, increase firearm safety and decrease suicides	Bertrand Berger, PhD, MCW Department of Psychiatry and Behavioral Medicine
\$359,173		War Memorial Center
7/1/2021 - 6/30/2023		
Integrating Advocates within a Health Care Setting to Strengthen Intimate Partner Violence Screening	Determining the best screening model of Intimate Partner Violence in a health care setting	Kimberly Gecsi, MD, MCW Department of Obstetrics & Gynecology
\$384,979		Sojourner Family
7/1/2021 - 6/30/2024		Peace Center
Recovery Residences that Work: Building Quality through Accreditation Standards Statewide	Addressing the persistent, high levels of substance use disorders in Wisconsin by developing accreditation and quality improvement systems to promote practice standards for recovery residences	Katinka Hooyer, PhD, MCW Department of Family Medicine
\$399,975		WisHope Recovery Center
7/1/2021 - 6/30/2024		
Understanding and Addressing Health Disparities in Wisconsin through Statewide Partnerships	Conducting statewide monitoring of health disparities, including the impact of COVID-19, and examining the impact of initiatives on improving health and reducing health disparities	Joan Neuner, MD, MPH, MCW Department of Medicine
\$1,500,000		MEDICINE
7/1/2021 - 6/30/2024		

PROJECT HIGHLIGHT:

Impacts of Nature in Proactive and Responsive Behavioral Health Treatment of Urban Latino Youth

\$400,000 | Award Period: 10/1/2020 - 9/30/2023

Improving the mental health of urban, Latino youth from low-income families may begin with connecting them to nature-based therapies and experiences through after-school programs, summer camps, and outpatient treatment programs.

Mental health care is in short supply, and viable alternatives to mental health clinical treatment are limited for urban, minority youth, due to distance and cost barriers, and are nearly inaccessible for non-English speaking families. With youth suicide rates and mental health hospitalizations in Wisconsin consistently surpassing national rates, increased attention is being paid to both prevention and alternative, more accessible therapies.

An AHW-supported study, Impacts of Nature in Proactive and Responsive Behavioral Health Treatment of Urban Latino Youth, developed a nature-based behavioral health curriculum along with evaluation and assessment tools. The project is a partnership between the Sixteenth Street Community Health Centers (SSCHC), the Medical College of Wisconsin (MCW) Institute for Health & Equity, and two public elementary schools on Milwaukee's south side: Lincoln Avenue School and Zablocki School.

Starting in fall 2020, the three-year, \$400,000 project brought together school and community health center leaders, youth committees, behavioral health clinicians, academic evaluators, and environmental and traditional youth educators to inform, plan, and implement the innovative project.

Together, they created what they hope will be a replicable program model for nature-based mental health therapy for Latino youth in Wisconsin, and across the country.

Considerable research points to a broad range of benefits from contact with nature, but there's a dearth of studies on nature-contact therapy, especially for the nation's rapidly growing Latino population with considerable health disparities, according to a June 2018 literature review published by the International Journal of Environmental Research and Public Health.

The AHW-supported project focuses on primarily low-income families and under- or uninsured Latino youth (ages 8 to 10) who live on Milwaukee's south side. This is one of Milwaukee's most densely populated neighborhoods – 70% Latino – with limited access and exposure to safe green spaces for children to learn and play in their urban neighborhood.

SSCHC, which provides medical and behavioral health care to nearly 20,000 children in this area, serves as the primary community partner for the project and is familiar with the many social determinants of health impacting mental health and well-being among Latino children. It is one of the only clinics with completely bilingual services.

The nature-based curriculum of therapeutic interventions for Latino youth was developed with an expert who has 15 years of experience in curriculum development for this age group. The curriculum includes both preventative programming for children in existing after-school programs and summer camps, and responsive programming for children in SSCHC's Child and Adolescent Day Treatment Program.





Working together to figure out where best to plant a tree, or to find and remove invasive plant species, teaches conflict resolution. Picking up litter and learning about the consequences of litter on the natural environment and human health can teach responsibility.

When canoeing, children follow instructions (behavioral regulation), work together to paddle the canoe through the water (social skills building), and can use canoeing as a meditative activity (positive coping skill).

"We have seen a lot of potential for benefits of the program, anecdotally," said Jamie Ferschinger, director of the Department of Environmental Health at SSCHC.

She recalled hearing about a child who behaved differently in a canoe than in a clinical treatment environment – he was more talkative and didn't need his 'tough guy' front.

"Clinical settings are the treatment model," Ferschinger said. "We are an early innovator for systems change. We need insurance to see nature-based therapy as viable prevention and treatment approach for mental illness."

Helping youth access limited green space and nature requires a paradigm shift, Ferschinger said. "We are curating experiences. We don't do things for people; we do things with people."

Once they complete nature-based therapies and experiences, the SSCHC gives young participants a family membership to the Urban Ecology Center, a Milwaukee nonprofit that connects people in cities to nature and each other.

Project Principal Investigator Kirsten Beyer, an associate professor in MCW's Division of Epidemiology & Social Sciences within the Institute for Health & Equity, has watched kids gain confidence and improve their physical activity levels through nature programming.

For evaluation, the project team uses a range of tools, including a symptom checklist -- attention or selfregulation difficulties, for example – as well as other measures, such as a perceived stress scale. Youth learn mindfulness, reflection, self-regulation and build confidence through activities in nature, Beyer said.

"We're testing a program that, if successful, could be embedded into behavioral treatment or schools," she said. "We're teaching skills youth can take with them into their daily lives, offering benefits for well-being without substantial cost or stigma. It's normal to go hiking or canoeing; we leverage these activities to build skills such as mindfulness."



POLICY & SYSTEMS CHANGE

AHW's Policy and Systems Change pathway focuses on social, economic, health and health care policies and systems that create lasting, population-level health improvements across Wisconsin.

COMPLETED PROJECTS

- Access to Safe Shelter and Housing for Women in Street-based Sex Work
- Safe & Healthy Streets: Enhancing systems to increase walking & biking infrastructure in Milwaukee
- Lower Uninsured, STI, & Unintended Pregnancy by Integrating Services at Milwaukee Co. Health Depts.
- Breaking the Cycle: Collective Impact to Reduce Effects of Childhood Witness to Family Violence
- Healthier Children through a Shared Service Network Supporting ASQ Screening/ Early Intervention
- Gathering Resources and Aligning Community Engagement (GRACE) Hub

Find a summary of each closed project at ahwendowment.org/fundedprojects

\$973,000 FUNDED IN FY22

NEW INVESTMENTS

PROJECT NAME & AWARD	PROJECT AIM	PRINCIPAL INVESTIGATORS OR PRIMARY COMMUNITY ORGANIZATION
Battling the Bottleneck: Increasing Capacity for ASD Diagnosis within Primary Health Care Across Wisconsin \$504.117	Addressing systemic barriers to the diagnosis of autism spectrum disorder via studying relevant health care and educational systems	Kathleen Koth, DO, MCW Department of Psychiatry and Behavioral Medicine Marguette University
7/1/2021 - 6/30/2024		
Reducing Medication Errors: Adopting Evidence- Based Directions for Use on Prescription Labels	Improving patient understanding on how to properly take medication by working with health systems to standardize the directions for use on labels	Kenneth Schellhase, MD, MPH, MCW Department of Family Medicine
\$468,413		Wisconsin Literacy, Inc.
7/1/2021 - 6/30/2024		

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PROJECT HIGHLIGHT:

Wisconsin Medical Dental Integration Project

\$528,610 | Award Period: 1/1/2019 - 12/31/2022

Adding basic preventive care by dental hygienists at medical clinics during prenatal and early well-child visits may contribute to better overall health and reduce emergency department and operating room costs for health systems.

Periodontal disease during pregnancy leads to an increased risk of preeclampsia and delivering low birth weight and/or preterm babies if bacteria from gum disease or a tooth infection enters the bloodstream. Early childhood tooth decay left untreated may lead to mouth pain, difficulty eating, nutrition and sleep issues, behavior changes, and poor school performance at a critical time during brain development, as well as costly emergency department visits, tooth extractions and restorative procedures requiring general anesthesia. An AHW-supported Medical Dental Integration Project aims to address those issues, while also reducing equity barriers, by integrating a dental hygienist into the medical care team for people who are pregnant and children ages 0-5.

Currently, not enough dental providers accept Medicaid reimbursement. Family transportation, childcare, and work challenges when two separate appointments are needed for medical and dental care also make "healthy mouth-healthy body" outcomes less likely.

Wisconsin ranked last among all states for access to oral health services for children enrolled in Medicaid in 2016. Only 1 in 5 Wisconsin Medicaid eligible children ages 0-5 received preventive dental services that year, according to the Centers for Medicaid and Medicare Services – 100,000 fewer children than those receiving "well child" exams. Only 1 in 2 Wisconsin women received a dental cleaning during pregnancy in 2016, according to the Pregnancy Risk Assessment Monitoring System (PRAMS).

A \$528,610 AHW investment in the Wisconsin Medical Dental Integration Project is creating a new model for primary care clinics in Wisconsin to help change those outcomes. Through the project, which started in 2019, medical clinics can dovetail brief appointments with a dental hygienist for a young child waiting for immunizations, or a pregnant person waiting to see a physician. By maximizing time management within routine medical visits, the hygienist can provide a risk assessment, fluoride varnish, oral health education and coordinate follow up care, as needed, for children and people who are pregnant.

The AHW investment supports coaching and technical assistance by the Children's Health Alliance of Wisconsin and pediatrician Constance Gundacker, the project's principal investigator for the Medical College of Wisconsin.

Dental hygienists working in Wisconsin medical clinics through this project have seen pediatric patients during some 11,750 "well child" visits, and pregnant patients during some 250 prenatal visits since 2019, according to Jenna Linden, program leader for the oral health initiative at Children's Health Alliance of Wisconsin.

The Wisconsin Medical Dental Integration Advisory Council, which guides the statewide project, has representation from over 20 organizations, including federally qualified health centers, Wisconsin health systems, and other key professional dental and medical organizations. Delta Dental of Wisconsin Foundation also contributed project funding.



State laws have helped pave the way, including Wisconsin Act 20 of 2017, which allows hygienists to work at sites without direct supervision and authorization of a dentist.

A 40% increase to the dental Medicaid reimbursement rate in the 2021-2023 state budget, effective Jan. 1, 2022, may make medicaldental integration more financially sustainable and encourage clinics and large health systems to adopt the model as part of preventive care and equity priorities, Gundacker said. "Systems change always has competing priorities, so this has to align with system priorities."

"Funding through AHW allowed us the time to work on this, and the technical assistance needed to see the model spread in the midst of a pandemic with so many other competing priorities," Gundacker added.

Among the challenges to implementing the model: When a hygienist in a medical clinic identifies an issue requiring a dentist's attention, the medical clinic must coordinate a dental referral. The primary care clinic also must integrate hygienist credentialing and billing into administrative processes.

The Children's Health Alliance of Wisconsin partnership with the Medical College of Wisconsin is creating and supporting a model while evaluating how to make it sustainable, project team members said.

"Whole patient health is a rising priority in large health systems and is part of our conversation as we introduce an integrated approach," said Linden, of Children's Health Alliance of Wisconsin.

As patients get older, dental caries is a common chronic disease that interferes with diabetes management and contributes to heart disease.

"It's chronic, and it's preventable," added Lindsay Deinhammer, project manager for oral health at the Children's Health Alliance of Wisconsin. "Having a healthy mouth contributes to a healthy body."



ONGOING COMMITMENTS & IMPACT

Throughout fiscal year 2022, **AHW funding totaling more than \$113 million supported 95 active** projects devoted to health improvement research and programs devoted to public health improvement and health equity. These projects include multi-year initiatives undertaken by extensive, statewide partner networks focused on some of Wisconsin's toughest health challenges, including cancer and behavioral health.

COMMUNITY AND CANCER SCIENCE NETWORK

The Community and Cancer Science Network (CCSN) is a broad collaborative solely funded by AHW committed to reduce breast and lung cancer disparities in Wisconsin through engaging a network of community and academic partners through a process to transform partnerships. These transformed partnerships are grounded in the principles of deep equity, systems thinking, and the integration of biology to policy perspectives and are focused on creating equitable, scalable, and effective solutions to eliminate cancer disparities and achieve health equity in Wisconsin.

The work is guided by the Integration Hub which serves as a coordinating body for three complex initiatives:

- Research and Community Scholars Curriculum creates a space for fair and trusting relationships to develop between community members in Metro-Milwaukee and cancer researchers from the Medical College of Wisconsin. Research and community scholars participate together in a 9-month curriculum focused on cancer disparities, factors influencing disparities, communicating with diverse audiences, understanding different perspectives, and building equitable partnerships.
- Collaborative Work Groups bring a broad spectrum of perspectives together to focus on understanding and addressing breast and lung cancer in a new way. These work group teams will design, build, test, implement, evaluate, and disseminate innovative approaches to address breast and/or lung cancer disparities.
- Mammographic Quality brings together regional teams to examine whether mammography imaging, interpretation, and follow-up quality are influencing breast cancer disparities in Wisconsin and developing local and regional collaborative teams to determine and sustain quality metrics

"The idea behind the integration hub is to build collaborative infrastructure across the state. This initiative provides that environment; a structure and framework to do this work together and create sustainable solutions that can be applied to other focal areas in the future."

ASSOCIATE DIRECTOR OF CANCER CONTROL AND PREVENTION MEDICAL COLLEGE OF WISCONSIN

Find more information about the Community Cancer Science Network in the project highlight page for Addressing Cancer Disparities in Breast and Lung Cancer: Integration Hub at ahwendowment.org/ fundedprojects.

ADVANCING BEHAVIORAL HEALTH INITIATIVE

Fiscal year 2022 saw the end of phase two of this three-phase initiative advancing mental and behavioral health outcomes in 10 Wisconsin communities. Phase two involved a five-year, \$12.7 million allocation of the initiative's \$20 million multi-year commitment. Each of the **10 statewide Advancing Behavioral Health Initiative projects** entered the fifth year of their implementation phase, carrying out work in conjunction with a team of MCW academic partners to impact health in their communities that took on even more importance as the COVID-19 pandemic impacted mental health needs statewide. Alongside their work, AHW continued to support the initiative partners through a unique learning community model. During this reporting period, the following learning community meetings were held virtually:

- October 2021: Learning tools to apply a systems approach to improving impact and creating positive, meaningful and sustainable change and revisiting the results-based accountability model
- December 2021: Managing systems change efforts as projects shift to a sustainability focus
- March 2022: Preparing to apply a systems change lens for sustainability and managing efforts in a polarized environment
- May 2021: Engaging with state-level representatives about the mental health agenda and building skills in storytelling to support dissemination for sustainability

"One of the greatest gifts AHW gave the state of Wisconsin with this initiative was the gift of time; an eight-year project. If we give time and resources to people embedded within their communities who are passionate, connected, and dedicated, there is no limit to what they can accomplish."

MICHELLE BROADDUS, PHD ASSOCIATE PROFESSOR OF PSYCHIATRY AND BEHAVIORAL HEALTH MEDICAL COLLEGE OF WISCONSIN

Find information on each funded ABH Initiative at ahwendowment.org/AHW/What-We-Do/Our-Focus/Advancing-Behavioral-Health-Initiative.htm

CREATING WISCONSIN'S FIRST CANCER PRECISION MEDICINE SIMULATION UNIT

\$4,000,000 | Award Period: 2/1/2019 - 1/31/2024

The sequencing of the human genome has allowed medical researchers to identify genetic variants associated with certain diseases, fueling new diagnostic methods rooted in data revealed by genetic testing. Much work remains to be done, however, to integrate this new technology into routine patient care. And with the help of funding from the Advancing a Healthier Wisconsin Endowment, researchers at the Linda T. and John A. Mellowes Center for Genomic Sciences and Precision Medicine ("Mellowes Center") at the Medical College of Wisconsin (MCW) are working to understand and visualize the relationship between genes, health, the environment, and human wellness to better diagnose and treat rare diseases.

A MORE PRECISE MODEL

MCW Department of Surgery Professor and Mellowes Center Director Raul Urrutia, MD, explains that the current standard for genomic diagnosis is based upon information obtained from a patient's linear DNA sequence. "However," Dr. Urrutia notes, "we know this linear coding in the gene makes molecules in 3-D that work like nano machines."

Dr. Urrutia and his colleagues at the Mellowes Center are working to realize the untapped potential of precision medicine for patients in Wisconsin and beyond through the development of high-resolution phenotypes that will enable the next generation of data interpretation.

"Quite often, people who have an undiagnosed disease – sometimes called a rare disease – they don't even know [if] what they have is real, because there's no diagnosis," relates MCW Associate Director of Bioinformatics and Data Science Michael Zimmermann, PhD. "We can tell them, this is what happened [to you]. To actually give a name to [the disease] is a very meaningful thing for the patient."

Through 3-D modeling, researchers at the Mellowes Center can take syndromes, which are a collection of phenotypes or traits, and identify how a genetic variant in the patient disrupts function to cause a specific disease. The diagnosis provides peace of mind to patients, Zimmermann notes, because it names what affects them and helps explain why they have their particular phenotype.

Dr. Zimmerman continues, "We're able, through clinical genetics, to get that variant that has a high suspicion and then to apply the tools we have for the 3-D simulation of what happens over time to these proteins, and to give a better sense of why – not only what happened, but why."

By better understanding the role that genes play in the development of rare diseases, researchers and health care providers can better individualize the treatments they develop for patients, increasing the chances of success.

DRAWING ATTENTION AND TALENT TO WISCONSIN

As the first precision medicine simulation unit in Wisconsin and one of only a few in the U.S., the Mellowes Center for Genomic Sciences and Precision Medicine is drawing global attention for its transformational work in 3-D genomics.

"We have connected Wisconsin with a national and international network of experts in genomic science and precision medicine and data science, so as to bring more talent to the area and be connected to the world," observes Dr. Urrutia.

Work being done at the center, Dr. Urrutia adds, is creating new fields of study and career opportunities for medical practitioners attending the Medical College of Wisconsin. Exciting new degree programs spun out of this research include a master's degree in genetic counselling and a master's degree in precision medicine. The development of a master's degree in genomic analysis is also planned.

"In other words, 3-D genomics not only influences medicine, but it also brings new jobs to the new generation in order to change and improve health in Wisconsin," Dr. Urrutia explains.

The Mellowes Center team is leveraging AHW funding not only to build its own team, but also to create and strengthen collaboration opportunities with hospital partners and organizational allies, including the Clinical Translational Science Institute of Southeast Wisconsin and the MCW Cancer Center Office of Clinical Trials.

RETURN ON INVESTMENT

Referencing the unique opportunity created with the help of AHW funding, Dr. Zimmerman notes, "The AHW Endowment grant has helped us to build a platform. So, what we've been able to do takes our experience in precision oncology, takes our experience in the undiagnosed diseases, and we've been able to build a process that is supporting both of them. And that's something that's difficult to fund through some of the traditional venues that are very disease focused."

Dr. Urrutia adds, "We are very grateful for the support of a multi-year investment from the Advancing a Healthier Wisconsin Endowment, which [is] allowing us to push the frontiers of genomics beyond where they were ever before."

Reflecting on AHW's \$4 million, five-year investment in this project in a recent meeting of the MCW Research and Education Advisory Committee, one of AHW's governing bodies, AHW Director Jesse Ehrenfeld, MD, MPH, expressed enthusiasm for the promise of Dr. Urrutia and team's work to change clinical practice in a transformative way. "Overall, AHW couldn't be more pleased with this project's success and their impact on collaborative, multidisciplinary efforts to advance Wisconsin's health," said Dr. Ehrenfeld.

Find information about the Cancer Precision Medicine Simulation Unit at ahwendowment.org/ fundedprojects.



PROGRAMMING

BUILDING CAPACITY AND EXTENDING THE REACH OF EFFECTIVE HEALTH IMPROVEMENT SOLUTIONS

AHW adds value to the relationships we build with partners and stakeholders by providing technical assistance and learning opportunities aimed at maximizing the impact of promising research and successful public health strategies. By sharing resources, enhancing skills and making mutually beneficial connections between organizations and people who share our vision of a healthy Wisconsin, AHW creates new opportunities for good ideas to spread and improve the lives of family, friends, and neighbors throughout the state.

SUPPORTING FUNDED PROJECT SUCCESS: AHW TECHNICAL ASSISTANCE PROVIDER PROGRAM

The AHW Technical Assistance Provider (TAP) Program connects eligible AHW-funded projects to respected, experienced consulting organizations and individuals upon request, bringing the content expertise and experience of these consultants to the work of each project.

Through the program, projects work with TAPs dedicated to their funded project's specific needs, helping projects strategize solutions, overcome barriers, and maximize the success of their coalitions and collaborations as they drive toward successful outcomes for the health and people of communities across Wisconsin.

GROWING HEALTH IMPROVEMENT PARTNER CAPACITY: CATCHAFIRE

In 2021, AHW expanded our capacity-building offerings by joining forces with other Milwaukee-based funders and grantmakers to form the Greater Milwaukee Partnership Catchafire Program. This program aims to connect nonprofits with skills-based, virtual volunteers who provide highquality pro bono services across areas such as program management, finance and operations, marketing and communications, human resources, technology, fundraising, and more.

Through this program, AHW is sponsoring 75 Milwaukee-based nonprofits with a 12-month window of access to the service for an unlimited number of projects. Partners invited will be able to use the program to support the work of their AHW-funded project, or any work undertaken by their organization during the course of their 12-month window of access, supporting AHW's goal of building the capacity of partners to improve the health of Wisconsin residents.

In January 2022, we further expanded by partnering with the Wisconsin Partnership Program at the UW School of Medicine and Public Health to support nonprofit and public health partners across the state, including all local health departments. In just the first six months of this offering, 881 hours of time were donated to participating organizations, worth \$181,000.

dical College of Wisconsin

Coffee Conversations

with Scientists

LET'S TALK ABOUT HEALTH: COFFEE CONVERSATIONS WITH SCIENTISTS

AHW continued in fiscal year 2022 to partner with the Medical College of Wisconsin to make health and science experts accessible to all Wisconsin residents through the production and distribution of Coffee Conversations with Scientists, a monthly livestreamed event featuring the perspectives of trusted MCW specialists on timely health topics. Promoted across all MCW and AHW channels, each episode draws a sizeable live online audience, with archived episodes garnering hundreds of additional post-event views.

Exploring topics ranging from sleep health and hearing loss to Parkinson's disease and sports-related concussion, Coffee Conversations with Scientists provides reliable, actionable health-related information to the public, while also drawing attention to the life-changing research and public health programs driven by the Medical College of Wisconsin and the Advancing a Healthier Wisconsin Endowment.

PUBLIC STEWARDSHIP

Since 2004, AHW has been provided the extraordinary opportunity and responsibility to steward a generous financial gift on behalf of the people of Wisconsin. Today, we continue to advance our mission and purpose through effective oversight and management.

OVERSIGHT

AHW is an entity within the Medical College of Wisconsin's (MCW's) School of Medicine. AHW's operations are led by an MCW faculty member, who also serves as a senior associate dean in the MCW School of Medicine and reports to the dean of the School of Medicine. The director provides oversight and day-to-day direction for AHW staff. Governance and oversight of AHW is provided by three entities: The MCW Consortium on Public and Community Health, the AHW Research and Education Advisory Committee, and the MCW Board of Trustees.





Jesse Ehrenfeld, MD, MPH Senior Associate Dean and Director, Advancing a Healthier Wisconsin Endowment Professor, Anesthesiology, Medical College of Wisconsin



Elizabeth Giese, RN, MSPH Health Officer/Director, Eau Claire City/County Health Department



Stephanie Harrison, MA Chief Executive Officer, Wisconsin Primary Health Care Association



Joseph E. Kerschner, MD Provost and Executive Vice President, Dean, School of Medicine, Medical College of Wisconsin



Ian B.K. Martin, MD, MBA Professor and System Chair, Department of Emergency Medicine, MCW Emergency Medicine Physician-in-Chief, Froedtert & Medical College of Wisconsin Health Network



John R. Raymond, Sr., М́D President and Chief Executive Officer, Medical College of Wisconsin



The MCW Consortium on



Rebecca Rice, MA Chief Executive Officer. NorthLakes Community Clinic



Tony Shields, MSM President & CEO, Wisconsin Philanthropy Network



Joy R. Tapper, MPA (Chair) Executive Director, Milwaukee Health Care Partnership

laws.
The AHW Research and Education Advisory Committee (REAC) provides oversight for AHW investments and support of MCW-led biomedical and population health research, as well as programs to enhance medical education opportunities for the health workforce.

AHW Research & Education Advisory Committee



Ivor Benjamin, MD Director, Cardiovascular Center; Professor of Medicine, Physiology, Pharmacology, Toxicology, Cell Biology, Surgery, Medical College of Wisconsin



Cecilia J. Hillard, PhD Associate Dean for Research Professor of Pharmacology and Toxicology Director, Neuroscience Research Center, Medical College of Wisconsin



Ann B. Nattinger, MD, MPH, MACP

Senior Associate Dean for Research, School of Medicine Associate Provost for Research Professor of Medicine, Lady Riders Professor of Breast Cancer Research, Medical College of Wisconsin



Jesse Ehrenfeld, MD, MPH (Chair) Senior Associate Dean and Director, Advancing a Healthier Wisconsin Endowment Professor, Anesthesiology, Medical College of Wisconsin



Shelisa Dalton, MBA* Chief Financial Officer, Medical College of Wisconsin



José Franco, MD* Senior Associate Dean for Education School of Medicine, Medical College of Wisconsin



Joseph E. Kerschner, MD Provost and Executive Vice President, Dean, School of Medicine, Medical College of Wisconsin

Amy Prunuske, PhD*

Associate Professor, Department of

Medical School Regional Campuses,

Medical College of Wisconsin



Christopher P. Kops, CPA, MBA* Executive Vice President for Finance & Administration and Chief Operating Officer, Medical College of Wisconsin



John Mantsch, PhD* Chair and Florence Williams Professor of Pharmacology and Toxicology, Medical College of Wisconsin

*Christopher P. Kops, CPA, MBA, completed his term on the REAC on June 30, 2022. Shelisa Dalton, MBA; José Franco, MD, MPH; John Mantsch, PhD; and Amy Prunuske, PhD, began their terms on July 1, 2022.

HOW WE OPERATE

The MCW Consortium on Public and Community Health (Consortium) and AHW Research and Education Advisory Committee (REAC) follow standard request for application (RFA) processes, including a multi-stage application and review process for all funding awards. All full proposals are reviewed under AHW's supplanting requirements through the MCW controller's office prior to award commencement.

MCW-LED PROJECT (REP) APPLICATION PROCEDURES

The AHW Research and Education Program (REP) investment allocation is dedicated to advancing health through research and education initiatives. Supporting MCW-led research and education program funding awards, funds are distributed from AHW's REP investment allocation through a multi-level process that includes the submission of a letter of intent and full proposal. All letters of intent and full proposal submissions are screened by AHW staff to determine that all eligibility, content, and submission requirements are fulfilled, then are reviewed by the REAC for scientific merit and alignment with the AHW five-year plan. Research and Education Program (REP) REAC-initiated proposals are received upon invitation and involve additional work with the AHW scientific consultant and AHW staff to ensure the proposal's alignment with AHW's mission and vision. MCW-led project proposals received through AHW competitive funding opportunities also receive review for scientific merit by review panels consisting of expertise relevant to the proposed research and funding pathway. REAC-approved awards are advanced to the MCW Board of Trustees for final funding determination.

AHW's MCW-led Learning Event Support awards are distributed in adherence to the resource allocation and review process approved by the REAC. These smaller, rolling funding awards follow a review process that includes submission of a written application that undergoes AHW staff review and supplanting review prior to funding determination by AHW leadership.



COMMUNITY-LED PROJECT (HWPP) APPLICATION PROCEDURES

The AHW Healthier Wisconsin Partnership Program (HWPP) investment allocation is dedicated to community-academic partnerships for improved health. Supporting community-led funding awards, funds are distributed from AHW's HWPP investment allocation through a competitive application process that includes a multi-level review and assessment. All submissions are screened by AHW staff to determine that all eligibility, content, and submission requirements are fulfilled. Community-led project proposals begin with submission of brief proposals that go through a multi-level qualitative and quantitative assessment by an external merit review panel. Meritorious proposals are invited to submit a full proposal for review by an external merit review panel and funding determination by the MCW Consortium before advancing to the MCW Board of Trustees for final approval.

AHW's Community-led Learning Event Support awards are distributed in adherence to the resource allocation and review process approved by the Consortium. These smaller, rolling funding awards follow a review process that includes submission of a written application that undergoes AHW staff review and supplanting review prior to funding determination by AHW leadership.

AHW SUPPLANTING POLICY

As determined by the Order of the Insurance Commissioner of the State of Wisconsin, AHW funds may not be used to supplant funds or resources available from other sources. As such, AHW, via the MCW controller's office, conducts a review of all AHW funding awards for determination of non-supplanting in accordance with procedures approved by the Order.

EVALUATION OF PROGRAMS & PROJECTS FUNDED

Throughout the year, AHW evaluates the progress and outcomes of funded projects using regular progress and final reports as well as financial status reports and/or presentations, site visits, meetings, or subrecipient audits. Multi-year awards are reviewed for progress annually by the appropriate AHW oversight body. Project updates and outcomes are posted on our funded project listing at ahwendowment.org/fundedprojects.

FUND MANAGEMENT & FINANCIALS

FUND MANAGEMENT

The Advancing a Healthier Wisconsin funds are invested with the Medical College of Wisconsin Endowment Funds using a diversified asset allocation strategy that includes money market funds held by external investment managers, marketable debt and equity securities, bond and equity mutual funds, commingled bond and equity funds, other equity securities, and accrued interest and dividends thereon and are reported at fair value. The investment goal for the Advancing a Healthier Wisconsin funds, as approved by the Medical College of Wisconsin Board of Trustees, is to preserve the purchasing power of its investment, while providing a level of investment return and liquidity that funds its purposes within a reasonable and prudent level of risk. The Medical College of Wisconsin has a long-term investment objective for the endowment assets to earn on average a real (inflation adjusted) annual rate of return and to provide a return for appropriation of not less than the total annual spendable income rate under the endowment fund spending policy.

All Endowment Funds, including the Advancing a Healthier Wisconsin funds, are invested in a unitized pool. Pooling of funds allows an individual participating fund to benefit from diversification and economies of scale in the investment process. Income is also unitized and allocated based on relative value on the first of the month. Realized capital gains are reinvested in the pool. The separate identity of each fund participating in the Endowment Fund pool is fully preserved, and each fund's share in the income and gains and losses of the pool is assured.

The Advancing a Healthier Wisconsin funds are segregated within the Endowment Fund. With respect to the 35% allocation of the funds for the Healthier Wisconsin Partnership Program and the 65% allocation of the funds for the Research and Education Program, separate accounts for the endowed funds and the spendable income funds available for current and future program distribution are maintained.

Distributions are based on the MCW Endowment Fund Spending Policy. Investment earnings that are not distributed are restricted under the terms of the Grant Agreement.

FUND MANAGEMENT

A financial audit of The Medical College of Wisconsin, Inc. Advancing a Healthier Wisconsin Program was conducted by an external audit firm for the fiscal years ending June 30, 2022, and 2021.

The following pages reflect the financial position for the fiscal years ended June 30, 2022, and 2021 and the activities and changes in net assets for the fiscal year ended June 30, 2022.

ADVANCING A HEALTHIER WISCONSIN ENDOWMENT

Statements of Financial Position June 30, 2022 and 2021

(in thousands)

	2022	2021				
Assets						
Investments, at fair value:						
Spendable income funds	\$ 66,118	\$ 80,094				
Endowed funds	392,594	478,301				
Total investments, at fair value	458,712	558,395				
Total assets	\$ 458,712	\$ 558,395				
Liabilities and Net Assets						
Liabilities						
Due to The Medical College of Wisconsin, Inc.	\$ 450	\$ 98				
Total liabilities	450	98				
Net assets with donor restrictions	\$ 458,262	\$ 558,297				
Total liabilities and net assets	\$ 458,712	\$ 558,395				

ADVANCING A HEALTHIER WISCONSIN ENDOWMENT

Statements of Activities and Changes in Net Assets For the Fiscal Year Ended June 30, 2022

(in thousands)

	HWPP*	REP**	TOTAL
Changes in net assets without donor restrictions:			
Net assets with donor restrictions released from restrictions	\$ 6,604	\$ 14,122	\$ 20,726
Program Expenditures			
Faculty salaries	901	3,525	4,426
Staff salaries	695	4,693	5,388
Fringe benefits	326	1,773	2,099
Services, supplies, and other	403	4,131	4,534
Payments to community partners	4,279	-	4,279
Total expenditures	\$ 6,604	\$ 14,122	\$ 20,726
Increase in net assets without donor restrictions	-		-
Change in net assets without donor restrictions	\$ 6,604	\$ 14,122	\$ 20,726
Changes in net assets with donor restrictions:			
Contributions	-	-	-
Investment return	\$ (47,689)	\$ (31,620)	\$ (79,309)
Net assets released from restrictions	(6,604)	(14,122)	(20,726)
Decrease in net assets with donor restrictions	(54,293)	(45,742)	(100,035)
Net assets with donor restrictions at beginning of year	\$ 343,360	\$ 214,937	\$ 558,297
Net assets with donor restrictions at end of year	\$ 289,067	\$ 169,195	\$ 458,262

ADVANCING A HEALTHIER WISCONSIN

For the Fiscal Year Ended June 30, 2022 (in thousands)

The MCW Consortium on Public and Community Health authorized the following changes in outstanding commitments for the Advancing a Healthier Wisconsin program. These outstanding commitments will be funded on a reimbursement basis and recognized as expenditures after the amounts have been expended by MCW and the community partners.

	LIFE-TO-DATE AUTHORIZED FUNDING ¹	LIFE-TO-DATE EXPENDITURES	OUTSTANDING COMMITMENTS
Grants Awarded from Inception to June 30, 2022:			
Healthier Wisconsin Partnership Program	\$ 239,965	\$ 162,977	\$ 60,090
Research and Education Program	101,162	73,835	21,667
Support Services Provided by AHW Staff	28,699	20,990	3,980
TOTAL	\$ 369,82	\$ 257,802	\$ 85,737

¹ Reflects grants awarded net of grant reductions made due to the economic recession that began in December 2007.

OUR TEAM

LEADERSHIP



Jesse M. Ehrenfeld, MD, MPH Senior Associate Dean and Director Advancing a Healthier Wisconsin Endowment Professor, Anesthesiology Medical College of Wisconsin

Ugwuji N. Maduekwe, MD, MMSc, MPH Deputy Director, Advancing a Healthier Wisconsin Endowment Associate Professor, Surgery Medical College of Wisconsin



STAFF



Kate Beadle Grant Compliance Coordinator



Benjamin Martinez, MNM Program Manager



Abby Sokol-Roberts Salesforce Administrator



Amy Homel, MS AHW Administrator



Kelly Lietz, MA Communications Director



Nate Simon, MNA Philanthropy Fellow



Jessica Herzog, MA Program Manager



Yumari Ortiz, MBA Program Coordinator



Michael Plewa Digital Media Specialist



Julia Enright Grant Compliance Coordinator



Sarah Orizaga, MFA Administrative Assistant Sr.



Tracy Wilson, MPH Program Manager



Christina Ellis, MS Program Director – Strategic Investments



Mark McNally, PhD AHW Scientific Consultant for Basic Science



Madison Van Allen Data Analyst



Autum Kowalczyk, MBA Compliance Business Manager



Liliana Pezzin, PhD, JD AHW Scientific Consultant - Clinical/ Population Science



Nikia Woodard, MS Project Coordinator









Advancing a Healthier Wisconsin Endowment Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53226

> (414) 955-4350 ahw@mcw.edu ahwendowment.org

@ahwendowment

