COVID-19 response grants awarded for innovative research

The Office of Research and Innovation awarded grants to five research projects centered on issues related to COVID-19. Funded by the Meader Presidential Endowment, the research areas cover health, politics, religion, education and language support.

WMU launches online cybersecurity undergraduate degree
Beginning in fall 2020, WMU is offering a new interdisciplinary major designed to incorporate the computer science and business aspects of online security. The COVID-19 pandemic is further fueling the need for specialists to keep digital data and interactions secure.

Explore the program

WMU’s response to budgetary crisis caused by COVID-19

On May 11, President Montgomery and the president’s cabinet hosted a town hall to examine the University’s financial outlook and answer questions. A new website features a recording of the town hall, review of the budget brief, a frequently asked questions section, as well as proactive steps leaders are taking to secure our future.

Learn about the University’s response
Education professor offers teaching advice for caregivers of special education students

Center for Principled Leadership and Business Strategy launches new podcast

Broncos tapped to help address racial disparity in COVID-19 outcomes

WMU student recruiting and orientation captivating from afar

The Office of Admissions has revamped its entire approach to reach future Broncos virtually. Staff are connecting with incoming first-year students better than ever before through interactive live chats, online admitted student events and virtual tours.

Building a connection
WMU in the news

WMU researchers studying COVID-19 impacts
Local media featured research projects faculty are pursuing with support from the Office Research and Innovation’s COVID-19 response grant program.

WOOD TV  MLive

Debunking misinformation and myths surrounding the COVID-19 virus
Professor of Communication Sue Ellen Christian provides tips to separate facts from false information about the novel coronavirus.

WWMT

WMU, medical professionals, Broadway stars unite in song for COVID-19 relief funds
Spearheaded by Director of Music Theatre Performance Jay Berkow, The Resilient Project features more than 60 performers with doctors and nurses from across the country.

WWMT
KALAMAZOO, Mich.—The University’s Office of Research and Innovation has awarded five grants for research related to the COVID-19 pandemic. The projects cover a diverse field of study, from religion to education and language support.

"Our guiding principle was to advance excellence in the pursuit of knowledge and ideas to help tackle COVID-19-related issues," says Dr. Terri Goss Kinzy, vice president for research and innovation. "We think it’s going to be a major contribution from Western Michigan University to the nation’s response."

Totaling $31,620, the grants are funded by the Meader Presidential Endowment—a fund specifically designated for promoting excellence at WMU. A committee within the Office of Research and Innovation selected the winning projects from 35 proposals submitted by the campus community, looking for projects that had a broad impact, were collaborative in nature and could begin immediately in a remote capacity.

"They leveraged a unique expertise of WMU and were different than what many other universities are doing in this crisis," Goss Kinzy says. "We appreciated those that specifically engaged students in the work. We also looked for those that had a strong research plan."

The awards are not designed to be an exhaustive list of pandemic-related research at the University, rather a spark to ignite new ideas. Faculty and staff members who did not receive grants are encouraged to explore other internal programs and external funding opportunities. Information on those opportunities is available on the Office of Research and Innovation’s COVID-19 webpage, along with a number of helpful resources for researchers.
Factors motivating shelter-in-place orders; Drs. Matthew Mingus and Kevin Corder

Response to the pandemic by governors has varied across the United States. Mingus and Corder are analyzing the political decision-making by leaders in all 50 states to determine what factors led to issuing shelter in place orders—SIPOs. Working across two academic departments, they are also examining how SIPOs were similar and different, as well as the public rationale used to support issuing, or choosing not to issue, such executive orders. The research results will provide important insight about emergency management and public governance in the initial pandemic response, and may provide timely information in the event of significant second or third waves of COVID-19.

Development of low-cost respiratory monitoring device; Dr. Alessander Santos

COVID-19 primarily affects the respiratory system and potentially causes long-term respiratory impairments—some of which are still likely to be discovered. Instrumented spirometry is currently considered the best measure of pulmonary performance, but technology can be expensive. In order to reduce costs, Santos proposes developing a compact spirometer—a device that measures the air capacity of the lungs—for a fraction of the current price that could improve access to long-term care and reduce the number of fatalities related to long-term effects of the disease.

Pandemic response and religion; Drs. Stephen Covell and Diane Riggs

Religious organizations have been on the front lines of pandemic response, organizing food drives, participating in protests and adapting end-of-life services. Covell and Riggs hope to compile a global database of response in the United States and lay the groundwork for further research that could guide religious organizations and policy makers toward more effective disaster responses in the future. The research will also generate material for a new course at WMU and teach others in the field how to incorporate the material into their classes.

Accreditation and the future of higher learning; Dr. James Cousins

The rapid move to online education in higher education could have significant downstream effects, not only for educational environments, but also to standards of instruction. Cousins will develop a composite picture of national trends shaping how accreditors adjust their models of assessment and prepare the groundwork for a more comprehensive study of the implications of the changes for students, local communities, society and higher education as a whole.
Providing support for English learners; Dr. Selena Protacio

The onset of the COVID-19 pandemic abruptly ended in-person instruction for K-12 students, leading to a challenging transition to online education for many—especially vulnerable populations like English learners. Protacio’s project will focus on a rural school district where 1 in 5 students is an English learner and access to computers and tablets, or even internet service, is sometimes difficult to come by. She’ll provide voice recorders for all students in need so that teachers can record instructions and drop them off with standard work packets every week—increasing participation as well as academic and language proficiency. The results of this study will be used to assess the ability to use affordable technology alternatives.

For more WMU news, arts and events, visit WMU News online.

WMU launches online cybersecurity undergraduate degree

Contact: Joy Brown
May 15, 2020

KALAMAZOO, Mich.—Beginning fall 2020, WMU will offer a fully online Bachelor of Science in Cybersecurity that will benefit graduates and organizations in multiple ways. Enrollment is now open for the four-year degree program designed to help meet the increasing workforce demand for digital security specialists in areas ranging from government defense to supply chain operations.
Demand for cybersecurity experts has been growing for years as online professional and personal activities have increased. According to the U.S. Bureau of Labor Statistics, information security analyst jobs are expected to grow by 32% through 2028. As of 2018, the median annual pay was $98,350. Available positions are only expected to increase as organizations recognize how vital cybersecurity specialists are to their operations.

“We developed this degree based on the demand from industry,” says Jason Johnson, lecturer in the College of Engineering and Applied Sciences.

Companies, nonprofits, governments, schools and more need individuals skilled in technical disciplines, such as network security and data protection, to avoid breaches that can jeopardize physical safety, security and finances.

The COVID-19 pandemic, which has increased the number of online users and exposed the safety vulnerability of software and videoconferencing platforms, is further fueling the need for specialists who know how to keep digital data and interactions secure.

Students in WMU’s program will have the added advantage of acquiring invaluable skills that extend beyond the screen. Rather than developing curricula solely from a computer science perspective, WMU’s interdisciplinary cybersecurity major also relies on the Haworth College of Business for a business viewpoint on cybersecurity. The academic collaboration, program organizers say, will offer essential learning for today’s cybersecurity professionals who work in both realms.

“Companies are hungry for graduates who have tactical skills but also the ability to strategize, collaborate and communicate. As we have seen with the recent COVID-19 pandemic, data security is more important than ever as organizations provide remote work environments and the required security for their operations. Recent events will serve to accelerate and expand the demand for qualified cybersecurity professionals,” says Dr. Alan Rea, professor of business information systems.

“Security lies in this unique area where you have to understand the business side and the technical side” rather than one or the other, says Johnson. “You can get away with being a
manager of a division and have no idea how software is written, and you can be a software
engineer who just codes all day, but with security, you absolutely have to understand how
to translate between those two worlds.”

WMU’s cybersecurity students will also acquire practical experience as they earn their
degrees. For instance, they will be required to complete a senior capstone project with a
yearlong collaboration between student teams and organizations working to develop some
aspect of their overall cybersecurity posture.

“This might be a software development project, network infrastructure hardening or an
overall risk assessment of their technology, people and processes,” says Rea.

Overall, the program will offer the utmost in timing and location flexibility, thanks to an
asynchronous learning platform. Students will be able to access presentations and other
material to meet deadlines, but will be able to do so at their most convenient times.
Meanwhile, online input and interactions between students and instructors will take place
during each course.

Talks are progressing with regional community colleges for articulation agreements that
would allow students to easily transfer to WMU.

The program is designed to be taken anywhere in the world, and to be expansive enough to
train for a wide variety of cybersecurity positions that keep important online information
and transactions secure.

“Hackers are evolving. It’s gotten away from the kid in his mom’s basement defacing
websites. That was petty vandalism in a lot of cases,” says Johnson. “Now, it’s corporate
espionage. It’s nation-states. Things are getting much more organized and the attackers are
finding many more ways to profit by breaching security at all different levels.”

Program organizers, however, point out the need for cybersecurity experts is not just one
of immediacy.

“Cybersecurity professionals will be in demand for the long term. Even after the pandemic
subsides and organizations strategize to determine which virtual offerings worked well
and which ones did not,” says Rea, “cybersecurity specialists are one of the best ways to
mitigate or manage risk in a company or organization.”
KALAMAZOO, Mich.—Learning from home is difficult enough for those used to being educated in a traditional classroom setting, but for K-12 students who receive special education services and instruction, the challenges are more complicated and amplified.

As government-mandated stay-at-home orders and social distancing guidelines continue during the pandemic, how can caregivers best serve students whose academic struggles require individualized learning techniques?

**Dr. Luchara Wallace**, an associate professor of special education and director of the [Lewis Walker Institute for the Study of Race and Ethnic Relations](https://www.wmich.edu/lwir) at Western Michigan University, has some answers. As a former elementary and secondary school teacher who coordinated programming to support students with learning disabilities and emotional/behavioral disorders, a current family and policy studies researcher and a parent of a special needs student, her expertise makes her uniquely positioned to offer insight.

One important point she makes about the current status of K-12 education: No matter a student’s abilities, learning at home is not the same as homeschooling during this period.
“This is called triage and survival,” Wallace says.

A PROACTIVE APPROACH

Students who have special needs and now must learn at home during the pandemic are not only separated from their fellow students, but also from specialists who provide them with necessary services such as physical therapy, occupational therapy and additional literacy instruction.

Different school districts are meeting the challenge of altered educational delivery in different ways, as are individual teachers. Therefore, patience and perspective are needed, Wallace says.

The elimination of regular schooling, along with associated worries about the pandemic itself, can have cumulative negative effects on students, ranging from sleep disruptions to heightened anxiety or grief.

Wallace suggests caregivers continue to advocate for students by being proactive with their learning and keeping tabs on their emotional state.

“It’s up to families to keep a close eye and monitor children,” says Wallace.

Being proactive, she emphasizes, doesn’t mean being perfect. Modifications can be made to class assignments. Not all subjects may be able to be covered each day. Working with teachers to negotiate extra time for tests or projects is always an option. Creative and flexibility are crucial elements to assisting students with learning at home.

Maintaining routines is also important. Each student should be in regular contact with teachers for accountability and so they know educators still care about them and their efforts. Weekday schedules that require students to work on certain academic subjects at certain times will help generate a sense of normalcy and security.
“Case managers should always be looped into those conversations” with teachers about learning continuity, Wallace says, and annual reviews should be scheduled and maintained.

Above all, “Be comfortable and OK with not getting everything done. Your best is what you can do right now,” says Wallace. “Maybe your child is not focused enough to read at any given time, so read a passage for them and then ask them questions about it.”

Meanwhile, caregivers should practice self-care by taking teaching breaks when they need them and taking time to enjoy some beloved activities, Wallace says.

Free online education resources are available, and many others offer free trials. Here are some that Wallace suggests:

- Imagine Learning on YouTube, which supplements English, arts and math instruction.
- Epic, a book subscription service that can be used for students and families with a 30-day trial, and is free for teachers and their classrooms until June 30.
- We are Teachers featuring 20 free science videos.

PREVALENCE OF NEED

The number of students with special needs being served in U.S schools is on the rise, with some experts attributing the increase to improved identification methods. In the U.S. Department of Education's Condition of 2018 Education Report, the number of students aged 3 to 21 receiving special education services increased from 6.4 million to 7 million between 2011-12 and 2017-18. About 14 percent of students enrolled in public schools now receive such specialized instruction.

Center for Principled Leadership and Business Strategy launches new podcast, 'The Jungle'

Contact: Molly Goaley
April 29, 2020

KALAMAZOO, Mich.—Grab your earbuds, because the Center for Principled Leadership and Business Strategy at Western Michigan University has launched another method for tuning into the business world while sheltering in place.
"The Jungle," a podcast that aims to explore the wild and exciting side of business through thoughtful conversations with executives and other leaders, is now available through a variety of listening platforms. Hosts Dr. Doug Lepisto and Dr. Derrick McIver, faculty members and co-directors of the center, provide an up-close, unvarnished view into the emotions, practices and lived experiences of leading and strategy formation.

With 11 episodes available for streaming by mid-May, the podcast is currently examining how businesses and their leaders are navigating the uncertainty surrounding the COVID-19 pandemic.

"'Unprecedented' and 'unknown' are two words we often hear during this current crisis," says Lepisto. "The novelty of this situation raises a fundamental question: How do you create a path forward and lead others down that path? We want to take listeners up close to hear how great leaders attempt to do this."

Featured guests include John Bryant, former chairman and CEO of the Kellogg Company; Alessandro P. DiNello, B.B.A.'75, president and CEO of Flagstar Bank and Flagstar Bancorp; Dr. Edward Montgomery, WMU president; Patti Poppe, president and CEO of Consumers Energy, and many others.

"We wanted to get a candid look inside leadership and strategy from different vantage points across a broad spectrum of industries," says McIver. "The current times provide a rare opportunity to delve into how leaders deal with the uncertainties of running organizations. Each episode is intended to be a learning experience for listeners."
ABOUT THE CENTER FOR PRINCIPLED LEADERSHIP AND BUSINESS STRATEGY

The Center for Principled Leadership and Business Strategy at the WMU Haworth College of Business believes the path to purpose and profit is found in creating genuine value for others. Making this a reality in business requires leadership and strategic thinking to maximize benefits across stakeholders.

The center serves students, executives and the West Michigan business community by providing deeply immersive opportunities that combine education and professional business experience. Center faculty undertake large-scale consulting projects and executive mentorship for students, design "learning spaces of the future" and support students in acquiring and operating small businesses.

Two Broncos tapped to help address racial disparity in COVID-19 outcomes

Contact: Erin Flynn
May 18, 2020

LANSING, Mich.—Across the nation, COVID-19 is infecting tens of thousands of people daily, but it's impacting communities of color particularly hard. A new study conducted by a team of epidemiologists and clinicians found while Black Americans represent just 13.4% of the U.S. population, they make up more than half of all novel coronavirus cases, and nearly 60% of deaths nationwide and 40% in Michigan. Two WMU alumni are helping lead the charge to address the troubling disparity.

Studies show Black Americans in particular are disproportionately impacted by COVID-19.

(Getty Images)
**Dr. Renée Branch Canady**, who is CEO of the [Michigan Public Health Institute](https://www.mphi.org) and **Celeste Sanchez Lloyd**, Community Program Manager at [Strong Beginnings](http://www.strongbeginnings.org), are among a diverse group of two dozen medical professionals, health and community leaders appointed by **Gov. Gretchen Whitmer** to the Michigan Coronavirus Task Force on Racial Disparities. Led by **Lt. Gov. Garlin Gilchrist**, the group is tasked with developing strategies to address the disproportionate impact of COVID-19 on communities of color in Michigan.

"This virus is holding a mirror up to our society and reminding us of the deep inequities in this country," Whitmer said in a news release. "From basic lack of access to health care, transportation and protections in the workplace, these inequities hit people of color and vulnerable communities the hardest. This task force will help us start addressing these disparities right now as we work to mitigate the spread of COVID-19 in Michigan."

It's a task Canady has been preparing for her entire career. Having served in a number of capacities in local and state government as well as higher education, she says she's honored to apply what she's learned and experienced to advance the task force's agenda. Canady and Sanchez Lloyd both earned a master's degree in public administration from WMU.

"There's one thing to see a problem and there's another thing to seize the problem as an opportunity," says Canady, whose master's degree in public administration had a health emphasis—a degree she says set the trajectory of her public health career. "I think we're really endeavoring to seize this opportunity and, if we do things well, it improves systems and situations for many Michiganders beyond COVID-19."

One of the biggest challenges facing the task force is time. The group is working at a fast clip, meeting twice a week. Immediate issues members are working to address include examining COVID-19 testing and working on a strategy to implement a comprehensive program, as well as increasing access to primary care.
"The longer it takes, the more lives are impacted," Canady says. "We are working to identify effective and expedient solutions to protect the lives of Michiganders who've been affected disproportionately by this pandemic."

Public health issues are inherently difficult because they play out in public, says Canady, and they can often lead to an overly cautious—and slower—approach as health professionals double back on discussions before taking action. In an urgent pandemic situation, they don’t have that luxury.

The fight is personal for Canady. While her entire career has focused on cultural competence, health disparities and health inequities, the loss of her own infant son heightened both her understanding of and commitment to the issue.

"As a young African American mother, I learned that college-educated black women were more likely to experience an infant death than white women who had not completed high school," she says. "My own experience with infant mortality and the memory of my son gave me a passion and purpose that has allowed me to fight for the well-being of communities and people who have often been marginalized or oppressed in our society."

WMU student recruiting and orientation captivating from afar

Contact: Joy Brown
May 11, 2020

Milachristine Jao, Western Michigan University student ambassador
KALAMAZOO, Mich.—To get a sense of how accommodating Western Michigan University’s Student Recreation Center is (Hint: it’s the largest in the Mid-American Conference), how sleek Western Heights Residence Hall suites are for first-year students or what the state-of-the-art the College of Health and Human Services learning spaces look like, you have to at least catch a glimpse of them. Even in an era of social distancing, to do so is a cinch, thanks to virtual campus tours featuring panoramic views of key campus components.

Other pandemic-related changes, such as more in-depth, lengthier and livelier phone and video conversations with admissions counselors and student ambassadors, mean WMU’s hardworking staffers charged with the challenging tasks of enticing and welcoming students to the University are having to improvise more creatively.

The pivot to all-virtual services “has a lot of moving pieces and we want it to be excellent; not having any precedent can be challenging,” says Office of Student Transitions—OST—Interim Director Adrienne Fraaza. The goal: to distinguish WMU from other institutions by showing what makes it special.

Such an objective isn’t easy when every other school in Michigan has had to move its admissions and orientations online too, but Fraaza points out the necessity to develop digital strategies “presents a lot of opportunity for growth and innovation.”

“Because there is no precedent, we can forge new paths, try new things, collaborate with new people and examine how to more intentionally connect with Gen Z students and their families, and that is exciting,” Fraaza says. “It’s exciting to think about how we can recreate ourselves so that students know WMU is the place for them.”

QUICK ON THE DRAW

When WMU transitioned entirely to distance learning in mid-March and closed campus in compliance with government orders, the admissions team transitioned to working remotely themselves while implementing initial virtual options in three days. The entire Office of Admissions visit team created virtual admitted student events in eight days, says Director of Admissions Alicia Kornowa.

"Lunchtime Live" interactive chats, Western Wednesday webinars, virtual college fairs, a live chat feature during admissions business hours, additional interactive opportunities and a live virtual tour with student ambassadors—who are answering questions—are currently being offered. Other online events are also being planned so that prospective and admitted students can gain a sense of belonging without having to leave home.
The “feels,” so to speak—that emotional currency that’s essential for each student to commit to attending a higher education institution—remain vital, even as schools more fully embrace distance recruiting due to COVID-19. Knowing that college is a large financial investment, WMU’s admissions counselors are also continuing to keep affordability at the forefront.

“People want to see campus in person, experience the energy and get a real feel for campus. That’s hard to do virtually,” says Kornowa.

“It’s hard, but this is a good opportunity to meet students/families where they are ‘at’ (in their homes) and interact in a way that students are accustomed in their day-to-day lives,” she says. “We’re offering so much that groups tend to be smaller than via traditional, on-campus visit options and we’re finding that students are more likely to have in-depth conversations. We’ve received a lot of feedback about how apparent it is that WMU cares.”

Virtually every college and university have had to make adjustments. At WMU, admissions and new student activities are continuing to show how tailored learning opportunities are enabling students to find their purpose by targeting, and even changing, their career interests and still graduate on time.

“We’ve implemented far more than any other institution I’ve seen,” Kornowa says.

“Due to two on-campus admitted student events being cancelled, we created a virtual version of the day, featuring academic colleges and key support services for this population, and four virtual ‘days’ are offered this spring,” says Kornowa. “Additionally, with the assistance and creativity of our student ambassador team, we have really amped up our social media presence, not only to promote all of the new virtual options, but we’ve also shared videos to provide advice to incoming students, created top 20 polls and now use TikTok to show our personality as an institution.”

Want to know about some of the more unusual student organizations on campus? Participate in the “Dear Future Broncos” series that connects current WMU students with high schoolers. Interested in a what a particular department or program has to offer? Keep
your eyes peeled for activities such as the “The Art and Science of Engineering” free online class offered May 6, which featured Dr. Larry Mallak presenting about the role of design in engineering and technology disciplines, says Megan Anderson, associate director of admissions.

Staff are also using social media in more lighthearted ways, such as offering fun Facebook frames for accepted WMU students, and providing student ambassador information on their favorite books, songs and why they chose to attend Western Michigan University.

Kornowa emphasizes that WMU’s student ambassadors are key members of the University’s admissions “family,” and have worked just as exhaustively to make the transition from in-person recruitment to digital interaction a success.

“The virtual opportunities have allowed us to extend our reach further and get students’ and families’ personal questions answered,” says Sara Drabik, associate director of admissions. “While it may not be new information, it’s cool and informative because students and caregivers are getting the personalized attention to get their questions and interests addressed.

"The feedback we’re receiving is, so many students feel Western Michigan University is right for them because of this personal touch” practiced by Admissions and Student Transitions workers, says Provost and V.P for Academic Affairs Jennifer Bott during a recent online town hall meeting hosted by President Edward Montgomery and University cabinet members.

NEW STUDENT NECESSITIES

Like admissions, the Office of Student Transitions, which welcomes and familiarizes new students to the WMU campus community, has had to move its activities online. Overnight summer orientation—featuring extensive tours, fall class scheduling and the popular cabaret show “The Bronco Way” that reflects life as a WMU student—has been put on hold.
Western’s goal is to stand out from other institutions and show what makes it special.

Online academic advising will loosely follow the traditional schedule, with three-hour on-demand learning modules available in early June; advising appointments and course registration in June; and virtual student community sessions spanning July and beyond.

“We really want to facilitate connections and feelings of belonging for new students,” says Fraaza. “The goal is to offer multiple asynchronous meetings, information sessions and meet-and-greets that include current students, faculty, staff, academic colleges, Registered Student Organization representatives, affinity groups and so on. Basically, any place a student can find to get involved, we want to bring them in.”

The OST highly values collaboration and personal experiences with students to ensure they feel excited about being a part of the community. Therefore, the team is reaching out to and collaborating with other WMU departments such as WMUx, the Office of Student Engagement, WMU Signature and more for optimal student onboarding experiences during the pandemic.

The virtual transitional offerings will provide “dozens and dozens of opportunities to find their place, to find their people, to figure out where they fit in,” says Fraaza. “I think, I hope, that students will start to make some of those connections during the summer and then can build upon them when they start in the fall. If they know that WMU is a place that values connections and is intentional about helping them build community, I hope that’s what makes them feel excited about being a student here.”