



# THE PRESIDENT'S REPORT

ISSUE 108 | MAY/JUNE 2020

Dear Friends,

As we continue to navigate the uncharted territory of the coronavirus pandemic, I am reminded of a quote by Viktor Frankl, "When we are no longer able to change a situation, we are challenged to change ourselves."

We know that it will still be some time before we are past the pandemic and, in acceptance of that reality, we are committed to leading the way in adapting and changing our course to meet the demands of our present situation. National research tells us that most students are not interested in enrolling in a university unless they can have in-person experiences. Understanding this demand and the importance of our essential on-campus operations, we boldly announced that we are returning to campus in the fall.

We will, of course, continue to monitor the situation over the summer, and we have multiple planning committees being led by faculty experts, infectious disease specialists, physicians and others who are developing a number of safety protocols that will be required on campus. We

also are working on contingency plans so that we will be prepared for any scenario that may present itself.

Against the backdrop of the pandemic, our society is also facing the reality of COVID-19's disproportionate impact on communities of color, particularly black people, due to longstanding health and structural inequities that stem from legacies of slavery and racism in our country. In recent months, we have come to know the names of Ahmaud Arbery, Breonna Taylor, George Floyd and David McAtee. Whatever your perspective on the specifics of each case, I hope you agree that the loss of these lives is devastating.

Diversity and Inclusion is one of our Cardinal Principles and we strive to provide an environment where everyone can thrive and develop their fullest potential. As part of our commitment to that core principle, we have taken multiple actions to ensure we help inform and support our campus community with resources and strategies designed to counteract incidences of bias, microaggression and racism. Each of us must choose how to take

meaningful action to improve the society we live in. I hope you'll join me in committing to learn more, do more and be better.

In this report, you'll read about the inspiring story of five women of color who have made history as the largest doctoral cohort in our College Student Personnel Program. You'll read about our first-ever virtual commencement that celebrated over 3,200 spring graduates and about our ground-breaking discoveries that show how our incredible university community continues to lead the way in adapting quickly and responding to this unprecedented time.

These are times that certainly have and will continue to challenge us, change us and define us. As always, thank you for your dedication to the university and for your continued support. I have never been more proud to be UofL's president.

Go Cards!

**Neeli Bendapudi**  
President, University of Louisville



## Virtual commencement celebrated 2020 grads

UofL's newest graduates may have missed out on the traditional spring commencement rite of passage, but there was plenty of celebration nonetheless. The Class of 2020 was commemorated on their formal commencement date, May 9, with a virtual celebration on the digital microsite, [hereandbeyond2020.com](http://hereandbeyond2020.com).

The site included a bevy of video messages from state and local leaders, along with several special announcements for the graduates. Notably, Mayor Fischer proclaimed May 9 as UofL Graduates 2020 Day in the city of Louisville. The university announced that the space in the middle

of the Belknap Academic Building, Lutz Hall and Shumaker Research Building will be named the "2020 Quad," with a permanent marker to be installed at a later date. Student Government President Jasper Noble also announced that SGA will commission a mural in the Student Activities Center to commemorate the class.

The site included a number of interactive features, such as a social media feed that pulled in messages across Twitter, Instagram and Facebook dedicated to the hashtag #UofLGrads2020 and also a TikTok challenge. Users of the site could take a photo with The Thinker statue through an augmented reality feature or create a customizable "Class of 2020" graphic for graduates and share their names via social media. The site

also featured a few stories about extraordinary graduates, virtual performances of "Pomp & Circumstance" and the UofL fight song, a digital commencement program and more.

The virtual celebration was not intended to replace a traditional commencement ceremony. The university will still individually recognize graduates on stage during a ceremony in December, provided it is safe to do so at that time. The biggest objective with the commencement microsite was to bring the university and community together in support of our newest alumni and to wish them well as they set out to make a positive impact on the world, here and beyond.

## UofL's 'Melanin 5' makes history as part of PhD cohort

University of Louisville's "Melanin 5" is making history as the largest doctoral cohort in the College Student Personnel Program (CSP), housed within UofL's College of Education and Human Development. It is not only the largest cohort in the CSP's 40-year history, the self-proclaimed "Melanin 5" is also the first cohort to be composed entirely of women of color.

The quintet of women includes Marian Vasser, Nakia Strickland, Sherry Durham, Sarah Nuñez and Leondra Gully. The intent of the program is to prepare master's and doctoral students for careers in higher education, including roles in athletics, student success, enrollment management, alumni, financial aid,

admissions and obtaining a job as dean of students.

"It is so refreshing to be in an educational program cohort with four other women of color, who motivate and encourage me to achieve the educational and professional goals I have set for myself," said Strickland, assistant director of constituent relations in UofL's Office of Alumni.

Though they have big aspirations for their personal careers, the historical context of their class as a whole is not lost on them. "As five women of color, I know we are paving the way for those who will come after us," Strickland said. "I feel that we strive to leave our mark on the profession through the work we do and the research that will be done."

"While I have been encouraged for many years to pursue a doctoral degree, the mystification of the entire process made me itch," added

Vasser, executive director of Diversity and Equity. "It wasn't until others in this unique cohort continued to push me, once they were admitted, that I gave it serious consideration. Imagine that, a cohort full of folks who get you and who get the struggle. Having that built-in layer of support is a once in a lifetime experience."

Through their work together, the group has come to realizations

about themselves and their collective potential.

"This opportunity creates a community of scholars and shifts the culture on UofL's campus. We are support systems to one another and breaking the mold of who, what, and how higher education looks and performs. We are here to say now is the time to change and this is how it can be done," Nuñez said.



Marian Vasser, Sarah Nuñez, Sherry Durham, Leondra Gully and Nakia Strickland.

## Researchers develop more effective N95 mask

Scientists at the University of Louisville's Conn Center for Renewable Energy Research and the Advanced Manufacturing Institute of Science & Technology (AMIST) partnered with Advanced Energy Materials, LLC (ADEM) to develop and patent a more effective and reusable N95 mask to filter COVID-19 droplets and other airborne particles and viruses.

The masks are being developed using nanomaterial research at the Conn Center, a J.B. Speed School of Engineering center that usually focuses on commercializing innovations in solar energy storage, biofuels, solar fuels and energy efficiency. Researchers saw an opportunity to use their innovative work to help provide low-cost, effective personal protective equipment (PPE) for health care workers.

Unlike currently available N95 masks, which cannot be reused without special decontamination procedures, these cost-effective nanofilter masks can be easily washed, dried and reused. The partnership includes Ed Tackett, director of workforce development at AMIST, and chemical engineering Professor Mahendra Sunkara, director of the Conn Center. Sunkara co-founded ADEM in 2010 with his wife, CEO Vasanthi Sunkara, to scale up energy materials innovations from his work at the university. Tackett and Sunkara realized a growing PPE

challenge as the COVID-19 pandemic has unfolded.

"How do we as Kentucky respond to multiple waves of disease and low case rate due to success of 'stay safe' measures?" Tackett said. "We are all working together to keep the rate of incidence low, but that also means we will have difficulty in priority purchasing for PPE since Kentucky isn't a hotspot. Our solution is making them here instead of buying elsewhere."

The nanofilter innovation is currently undergoing testing with an independent laboratory to ensure durability and safety towards NIOSH certification, and the Conn Center and ADEM are working on transitioning this lab scale innovation to a manufacturing scale, including nanofilter cloth optimization, and mask molding techniques.

"The shortage of protective gear during this pandemic has made us rethink our strategy to utilize ADEM's nanowire materials for PPE," said Vasanthi Sunkara. "It just shows that with the right connections, expertise and resources, the university and industry can come together quickly to move innovation through manufacturing and into the market to affect this challenge head-on."

## Breakthrough technology shows promise fighting coronavirus

UofL researchers have developed a technology that is believed to block the novel coronavirus SARS-CoV-2 from infecting human cells.

The technology is based on a piece of synthetic DNA – an "aptamer" – which targets and binds with a human protein called nucleolin. Early tests show that this aptamer may stop viruses, including novel coronavirus, from "hijacking" nucleolin to replicate inside the body. UofL is seeking to fast-track development, including application to the Food and Drug Administration for approval to start treating patients seriously affected with COVID-19.

The aptamer was discovered by UofL's Paula Bates, John Trent and Don Miller, who have applied it in a variety of ways, most notably as a potential therapeutic drug against multiple types of cancer. With the current global pandemic of coronavirus and the COVID-19 disease it causes, Bates partnered with fellow researcher Kenneth Palmer to apply the technology once again.

"Like many scientists, as soon as I heard about the new coronavirus, I wanted to help and started to think about how my area of research might intersect with coronavirus research efforts," said Bates, a professor of medicine. "I am fortunate to be at UofL, which is one of the few places

in the country where we have the facilities to do experiments using the SARS-CoV-2 virus."

Palmer, director of UofL's Center for Predictive Medicine for Bio-defense and Emerging Infectious Diseases (CPM), conducted proof-of-concept experiments showing the aptamer was effective against the virus at doses previous research has shown to be safe in patients. Palmer also is working on another potential COVID-19 treatment, Q-Griffithsin, developed at UofL in partnership with the National Cancer Institute and the University of Pittsburgh.

The CPM houses UofL's Regional Biocontainment Laboratory, one of only 12 regional and two national biocontainment labs in the United States and the only one in Kentucky. Established with support from the NIH to conduct research with infectious agents, the lab includes Biosafety Level 3 facilities built to the most exacting federal safety and security standards. The stringently secure facilities protect researchers and the public from exposure to the pathogens being investigated.

