

Office of Research and Economic & Community Development

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Dear Colleagues,

As I write this letter, the Office of Research, Economic and Community Development (ORECD) is in the process of preparing for our five-year review. This process involves thoughtful reflection on our key functions, processes, and accomplishments, along with our goals moving forward. I find the exercise to be a good reminder of why we are here. Even with the often overwhelming challenges each one of you has faced this last year, we have accomplished a great deal as a research community. Because of your hard work, UMSL has increased research expenditures by 57% over the past five years!

I am incredibly proud of our STEM faculty for recent NSF and NIH wins and prestigious awards such as **Lon Chubiz** for winning a \$759,888 NSF CAREER award for his research on biosynthesis of lipid monolayer membranes in bacteria, **Xuemin Wang** for his \$1.2 million NIH award to examine circadian rhythm and lipid metabolism accumulation in bacteria, **Chancellor Kristin Sobolik** and team for winning a \$1 million NSF ADVANCE to increase STEM equity at UMSL, and to **Patricia Parker** for her prestigious election to the American Academy of Arts and Sciences for her distinguished contributions to the field of evolutionary biology.

If the pandemic has taught us anything, it is the importance of research in saving lives. I am continually amazed at the level of community-based research going on at UMSL that is building a stronger, healthier, and more inclusive region. We salute our researchers who have secured funding for and do this vital work including **Rachel Winograd**, **Devin Banks**, and **Sheila Grigsby** for a \$3.1 million win from the Missouri Foundation for Health to reduce overdose deaths among black men in North St. Louis, **Beth Huebner** and St. Louis County partners for \$1.3 million award from the John D. and Catherine T. MacArthur Foundation to continue advancing justice reform while reducing the county's jail population and eliminating racial disparities, **Todd Swanstrom** and **Kiley Bednar** for a \$178,000 award from the Retirement Research Foundation to study home repair needs of older adults in St. Louis and **Elizabeth Sale** and **Katie Ellison** for a \$350,000 grant from the Missouri Foundation for Health for gun violence and suicide prevention in Southeast Missouri.

Strengthening education at all levels is critical to building a stronger region. I could not be prouder of our education faculty including Natissia Small and team for a \$ 1.3 million award from the U.S. Department of Education to establish a TRIO Student Support Services program, Shea Kerkhoff, Katherine
O'Daniels and Nancy Singer for a \$5.1 million win from the Missouri Department of Elementary and Secondary Education (DESI) to promote evidence-based literacy strategies among local educators, Jerome Morris and team for a prestigious \$1 million grant from the Spencer Foundation to investigate the promise of communally bonded schooling, and April Regester, Lindsay Athamanah, and team for a \$2.1 million award from the U.S. Department of Education to expand UMSL's successful SUCCEED program that helps students with intellectual and developmental disabilities complete a postsecondary education.

Moving discoveries to the market where they reach and help people and the economy is an important part of academic research. Many of you are involved in applied research, which we proudly recognize on the

new <u>Wall of Innovation</u> featuring issued U.S. patents in the Science Learning Building lobby. Among the many exciting applied-research projects at UMSL are <u>George Gokel</u> and team's work on a product to enhance the efficacy of antibiotics against resistant superbugs, and new blockchain and smart contracts software created by <u>Jianli Pan</u>'s lab to better secure IoT devices on the edge. Pan and his graduate student co-inventor, **Jianyu Wang**, were also recognized by both the Bar Association of Metropolitan St. Louis and UMSL with separate "inventor of the year" awards.

I am grateful for your work to keep research and commercialization front and center over the last year – for continuously submitting proposals, manuscripts, and invention disclosures – even though there were many tough days and weeks when maybe all you felt you could do was keep swimming.

On behalf of the entire team at the ORECD, we invite you to keep swimming with us! Increasing our research funding and bringing discoveries to those who can use them is a sure strategy for helping UMSL remain a vibrant, public research university.

We've missed you, and we look forwarding to seeing you all on campus! Please stop by to see us in 341 and 346 Woods Hall.

Best wishes for a safe, successful fall semester.

Chris Spilling
Vice Chancellor