Research at the forefront from the **UMKC School of Computing and Engineering**

VANGUARD

THE POWER OF SOLAR

One researcher's mission to take solar energy mainstream

/FROM THE DEAN

Dear alumni, supporters and friends,

It is my pleasure to bring you the latest issue of Vanguard, the UMKC School of Computing and Engineering's annual research publication. Our team began this magazine three years ago. We recognized the amazing discoveries and profound achievements happening within the walls of Flarsheim Hall – and wanted to tell those stories.

All of you have a vested interest in our school's future. I'm happy to report that these last several years we have been wildly successful in moving forward our mission for computing and engineering at UMKC. Our research funding doubled from 2017 to 2018, now reaching nearly $3.5 million a year. It's an upward trend we're confident we can maintain.

As I write this letter, I can look out the window and watch the new Robert W. Plaster Free Enterprise and Research Center (FERC) rise from the snow-covered ground. Since I came here eleven years ago our engineering has grown and now we're bursting at the seams. Not only do we need more space, but our research is advancing. We needed new, state-of-the-art equipment and a venue to match.

This facility will serve not only the dedicated faculty at SCE, but everyone on campus. The FERC will house the only clean room at UMKC. It will also feature research-grade 3D printing for which our health science partners are already planning projects to print biosensors and prosthetics.
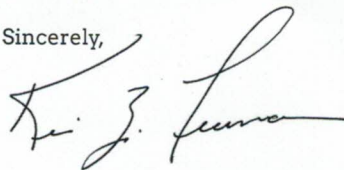
It will be home to more than $3 million in augmented and virtual reality equipment where researchers can simulate outcomes, train graduate students and explore big data in new and exciting ways.

And these new opportunities are not just for the faculty we have now, but also for the faculty we hope to recruit. We hope the community will look to the FERC and see all the possibilities it can offer. Industry partners who want to experiment and explore in this space will be welcome. And students will, of course, come here to be inspired and to learn. We believe this new building will serve as a magnet for talent across the region and we're excited to open its doors.

But until then, there is still plenty to celebrate. Inside these pages, we have three stories for you about how our vanguard is leading the way for UMKC… and one article that helped me better grasp a new concept. From all of us at SCE, we hope you enjoy.

Sincerely,

KEVIN Z. TRUMAN, PH.D., F.ASCE
Vice Provost, UMKC
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