Dear College of Engineering friends,

The end of the year provides us an opportunity to reflect on our many achievements, look forward to a promising future, and thank those who have made our progress possible. We have seen another year of remarkable growth within the MSU College of Engineering. Working together, our academic, economic and entrepreneurial ventures continue to move us forward to become the fastest rising college of engineering in the country.

Among the many highlights of 2016:
We opened a new Bio Engineering Facility, bringing together faculty from across disciplines and colleges to engage in revolutionary, cutting-edge research that will improve and save lives around the globe. At the same time, Christopher Contag, a pioneer in molecular imaging, joined us to direct the new interdisciplinary Institute for Quantitative Health Science and Engineering that will be housed in the new facility. Dr. Contag also serves as the inaugural chair of the college’s new Department of Biomedical Engineering.

New faculty leadership also includes MSU Foundation Professor James Klausner as chair of the Department of Mechanical Engineering, and Venkatesh Kodur as chair of the Department of Civil and Environmental Engineering.

The College of Engineering added 23 new tenure-system faculty members this academic year – and more than 30 new faculty members in the past 15 months. Among them were renowned computer scientist Wolfgang Banzhaf, who joined the Department of Computer Science and BEACON as the John R. Koza Endowed Chair in Genetic Programming; and Jeffrey Nanzer, who joins us as the Dennis P. Nyquist Assistant Professor in the Department of Electrical and Computer Engineering.

These new faculty members join a distinguished group of exceptional educators and researchers, a number of whom have been recognized as being at the top of their fields. Most notable in 2016, University Distinguished Professor of computer science and engineering Anil Jain was elected to the National Academy of Engineering and as a Foreign Fellow of the Indian National Academy of Engineering. Thomas Reuters also listed him among the most highly cited researchers of 2016. Larry Drzal, University Distinguished Professor of chemical engineering and materials science and the director of the MSU Composite Materials and Structures Center, received two of his field’s most prestigious honors - the Medal of Excellence in Composite Materials from the University of Delaware and the 2016 Lifetime Achievement Award by the Automotive Division of the Society of Plastics Engineers. Xiaobo Tan, MSU Foundation Professor of electrical and computer engineering, was named a Fellow of IEEE. Roger C. Haut, University Distinguished Professor of mechanical engineering and radiology, was awarded the 2016 H. R. Lissner Medal from the Bioengineering Division of the American Society of Mechanical Engineers (ASME). And, Brian O’Shea, an associate professor in the Department of Computational Mathematics, Science and Engineering, was named a Fellow of the American Physical Society.

Richard Lunt, a pioneer in renewable energy and energy efficient technologies, was appointed to the Johansen...
Crosby Professorship of Chemical Engineering. The professorship is part of the educational initiatives of the Johansen Crosby Endowment, established by alumnus Edwin Johansen Crosby (BS ‘50, chemical engineering) to honor his parents.

Thomas F. Wolff, who retired in August following 17 years as associate dean for engineering undergraduate studies and a year as acting chair of the Department of Civil and Environmental Engineering, was elected national president of the 119,000-member civil engineering honor society, Chi Epsilon.

Other prestigious awards included: Wei Lai, an assistant professor of chemical engineering and materials science received a National Science Foundation Faculty Early Career Development (CAREER) Award for his work on bi-functional battery materials; Matthew Hirn, assistant professor in the Department of Computational Mathematics, Science and Engineering, received a Young Faculty Award from the Defense Advanced Research Projects Agency (DARPA) for work focused on developing algorithms that can learn intrinsic physical patterns from data generated by molecules, crystals and other solids; and Christopher Contag, chair of the Department of Biomedical Engineering, will receive the 2017 Britton Chance Biomedical Optics Award from SPIE, the international society for optics and photonics, in recognition of his outstanding lifetime contributions to the field of biomedical optics.

Our research focus brings world-leading expertise to disciplines that address areas of critical importance to Michigan, our country, and the world. An example of our multidisciplinary approach would be MSU's Mobility Studio and CANVAS (Connected and Autonomous Networked Vehicles for Active Safety), a network of collaborative research to integrate mobility, safety, and security in autonomous vehicles. CANVAS will be showcased at the North American International Auto Show in January as part of Automobili-D research focused on autonomous vehicles.

We continue to grow an expanded and diverse research portfolio in areas of global significance. Peter Lillehoj, assistant professor of mechanical engineering, received a Grand Challenges Explorations Grant from the Gates Foundation for his work to develop a skin patch-based rapid diagnostic test for malaria. Mi Zhang, assistant professor of electrical and computer engineering, was awarded a $1 million NSF grant as lead of a team developing new technology that can help detect depression and other mental health issues in college students.

We once again welcomed a growing student body within the College of Engineering. Included in the 5679
undergraduates and 735 advanced degree students are a record number of women (now comprising 21 percent of the college), and underrepresented minorities making up 8 percent of the undergraduate population.

In 2016, nine of our top students earned MSU Board of Trustees Awards for attaining 4.0 GPA through graduation. They are Nicholas Durak (computer science), Christine Isaguirre, (biosystems engineering), Nolan Reichkitzer (chemical engineering), Andrew Slatin (mechanical engineering), Bowen Tan (electrical engineering), Timothy Taviano (computer science), Jacqueline Thelen (biosystems engineering), Rachael Acker, (mechanical engineering) and Adam Schoonmaker (computer science). Additionally, 2015 Goldwater Scholar Rebecca Carlson, a senior in chemical engineering, was nominated for both Churchill and Marshall Scholarships this year, and Laura Azouz, a junior in chemical engineering, was nominated for a Goldwater Scholarship.

For the third consecutive time, the college ended its fiscal year in record-breaking fashion, raising $19.3 million in development funding in 2015-16. Through the generous support of alumni, corporate friends, and other donors, we are closing in on our $80 million fundraising goal in the MSU Empower Extraordinary capital campaign, having raised more than $76 million to support the academic, research and outreach priorities of the college.

Computer scientist and entrepreneur John R. Koza pledged the largest individual gift in the history of the MSU College of Engineering. A $10.7 million bequest to support the college and the BEACON Center joins a previous cash gift of $2 million (establishing the John R. Koza Endowed Chair in Genetic Programming), bringing his total gift to $12.7 million. A $1.7 million gift from alumnus Craig A. Rogerson (BS ’79, chemical engineering) will create an endowed faculty position and scholarship to advance the Department of Chemical Engineering and Materials Science. Among other notable gifts this year are two anonymous donations - a $5 million scholarship commitment from a Spartan engineer who was able to complete college through a scholarship fund; and a pledge of $2 million to train the next generation of engineers who will rebuild our bridge infrastructure.

As we reflect on all of our accomplishments at year’s end, it is also appropriate to remember those that are no longer with us. The College of Engineering lost a great friend in Dennis P. Nyquist, professor emeritus of electrical and computer engineering, who passed away December 9, at the age of 77. Earlier this summer, we tragically lost Mike Sadler (BS ’13, Applied Engineering Sciences; MS ’15, Public Policy) in a car accident on July 23. He was the punter for MSU’s Rose Bowl winning football team in 2014, and the university’s first four-time Academic All-American, with a near perfect 3.97 GPA in applied engineering sciences. Mike was to attend Stanford Law School this fall; he was 24 years old.

Our success is possible only through your hard work and dedication. While I have mentioned a small number of contributors in this message, I fully realize how many more of you have added to our achievements. My sincere thanks to the entire MSU Engineering family for the commitment that you show throughout the year, and the success stories that you have helped make possible in 2016. I look forward to working with all of you to achieve an even brighter future in the new year.

Happy holidays and best wishes for 2017!