"WE ARE CONTINUALLY CURATING A WHOLE-BRAIN NETWORK TO CONNECT WITH NEW PARTNERS ACROSS THE UNIVERSITY, THE REGION, AND THE WORLD; INCREASINGLY, NEW PARTNERS SEEK US. LIKE ALL THE BEST PARTNERSHIPS, IT BENEFITS BOTH SIDES BY BRINGING NEW WAYS OF THINKING AND LOOKING AT PROBLEMS FROM MULTIPLE VIEWPOINTS."

GREETINGS FROM NORTHWESTERN ENGINEERING

The main story in this issue, on Whole-Brain Engineering, lies close to my mind and heart. Though we’ve been promoting this approach for years, this year was noteworthy in terms of recognition. I was pleased and humbled to receive the 2017 Bernard M. Gordon Prize for Innovation in Engineering and Technology Education from the National Academy of Engineering for our Whole-Brain Engineering philosophy.

In some ways, it is the culmination of more than a decade of work merging left-brain analytical thinking with right-brain creativity to educate the leaders of the future and to expand the impact of engineering. This has been a shared effort that involved a fantastic team composed of members from across the school and partners across the University; I share this prize with them.

Our Whole-Brain Engineering strategy has helped build a network of graduates who can think and work across disciplines—you’ll find evidence of this in the alumni we profile in this issue. It is this type of thinking that allows us to partner with the Medill School of Journalism, Media, Integrated Marketing Communications to form a new Bay Area Immersion Experience (page 22). It is this type of thinking that allows students like Marc Gyongyosi to have the idea to use indoor flying robots for warehouse analytics, and then provide the space, and guidance, to turn that idea into a business (page 36).

This type of cross-disciplinary thinking is also now a part of our faculty, finding its way into our research enterprise. Our synthetic biology faculty group exemplifies part of this broad thinking and is redefining what biology can do for us.

Finally, our whole-brain thinking platform gives us the framework to help students live their best lives and achieve balance in what is often a rapidly moving chaotic world. Our Women in Computing group helps provide community and encouragement to our female computer science students. Our Designing Your Life course helps students ask the big questions about what they want from life and then use design thinking to achieve it.

The best part about this philosophy is that it is scalable and autocatalytic. We are continually curating a whole-brain network to connect with new partners across the University, the region, and the world; increasingly, new partners seek us. Like all the best partnerships, it benefits both sides by bringing new ways of thinking and looking at problems from multiple viewpoints.

As always, I welcome your feedback.

JULIO M. OTTINO
Dean, McCormick School of Engineering and Applied Science

On the Cover

Dean Julio M. Ottino received the National Academy of Engineering’s Gordon Prize for Whole-Brain Engineering, Northwestern Engineering’s principal guiding strategy for more than a decade. Read more on page 14.

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