Illuminating Individuals

The 1893 Columbia Exposition in Chicago brilliantly showcased how electricity was on the verge of transforming daily life. That same year, John Boswell Whitehead, the alumnus who would become the first dean of Engineering at Johns Hopkins, was studying applied electricity, fascinated by his era’s powerful possibilities.

The impetus to innovate, which propelled Engineering to the forefront during Whitehead’s almost three decades as dean, still energizes the Whiting School today. Faculty innovate at the nano, the subatomic, the cellular, and many other scales. In this issue, we highlight not only the first dean but the work of current faculty, students, and alumni.

Computer Science Professor Avi Rubin’s penetrating analyses of information security (and lack thereof) are drawing attention internationally to cyber vulnerabilities. From faculty investigations of imaging that could find a face in a crowd to pairing proteins to create a molecular switch, Hopkins engineers are pioneering in their century’s most exciting technologies, just as Whitehead did in his time.

And they are doing so not only on measurable scales but on the human scale as well. Mechanical Engineering Professor Louis L. Whitcomb, whose research is featured on the cover, this spring received a 2004 Alumni Association Excellence in Teaching Award. He is “clear in his teaching, and extremely approachable,” noted one student.

Such links between faculty and their former students can continue long past graduation. Theodore M. “Ted” Schad ’39, one of three generous individuals profiled in Wider World, fondly recalls Abel Wolman ’13 A&S, ’15, “who was always right there for me.” In Alumni Up Front, you’ll meet a wonderful Hopkins couple, June Li ’91 PhD and Yan Ke ’89 PhD, co-founder of the global NetScreen Technologies.

It’s not just our alumni and faculty who are committed to Engineering at Hopkins. Generous Whiting School friend Dr. Walter L. Robb is offering a farsighted, dollar-for-dollar challenge to Whiting School supporters to consider establishing graduate fellowships.

Whiting School students now have even more opportunities to make contacts professionally, through two new options for assistance in finding internships (see Making Waves). We invite you become a mentor or identify internship opportunities in your workplace. The drive, dedication, and determination of Hopkins Engineering students would be inspirational to anyone. And be sure to read about the multitalented Tara Johnson ’02, ’02 (Peabody), awarded a Jack Kent Cooke Foundation Graduate Scholarship.

John Whitehead...Ted Schad...Yan Ke...June Li...Tara Johnson...Louis Whitcomb...Avi Rubin...the calibre of individuals profiled in the Johns Hopkins Engineer represents a continuum of Engineering history. We hope you’ll join us in celebrating during the Hopkins Engineering/Whiting School 90th/25th anniversary year festivities to come.

—The Editors
"I have come to love it here"

"Only because of the generous support of donors like the Boennings and the Doub families am I, and students like myself who struggle with meeting financial requirements, able to attend a prestigious university like Johns Hopkins. The students, the facilities, and the professors are of such high caliber that I feel honored to be a part of it all. I have joined the varsity water polo team and the Hopkins Undergraduate Research Journal and am creating a campus chapter of Engineers Without Frontiers. Because of my entrepreneurial aspirations, I plan to pursue an MBA, then begin my own electrical engineering business. I am extremely thankful to be here, in a place with limitless opportunities."

—Cole Ratias, sophomore Electrical Engineering major and Dean’s List student

The Robert A. and Irene M. Boenning Scholarship Fund was established in 2001 by Irene M. and Robert A. Boenning ’62 for need-based scholarships in the Whiting School’s Electrical and Computer Engineering Department.

The Cyrus L. Doub Memorial Scholarship was established in 1977 in memory of the 1919 Engineering graduate by his sister, Frances Doub North, and his son, Richard M. Doub. Preference is given to Electrical Engineering students at the Whiting School and awards are based on academic merit and financial need.