

his issue of Columbia Engineering magazine focuses on engineering and applied science leaders making an impact—alumni and students who have made their mark on this generation and hold the promise of doing so for the next. While we are highlighting only a small fraction of our present and future leaders, these men and women are standing on the shoulders of giants, those alumni of generations before us.

It was Sir Isaac Newton who first recognized the importance of the foundation laid by those who had preceded him. "If I have seen further, "he said, "it is because I am standing on the shoulders of giants," an axiom for Columbia Engineering. For each generation, our alumni have become the teachers and mentors for the next generation of leaders.

One of the early graduates of the Engineering School, Michael I. Pupin, Class of 1883, was such a giant, earning fame as the inventor of the Pupin coil and father of longdistance telephony. His pupil and, later, faculty colleague in the Department of Electrical Engineering, Edwin Howard Armstrong, Class of 1913 (see photo at left), invented three electronic circuits fundamental to modern FM radio, television, and radar.

As our alumni were developing the new discipline of electrical engineering, our civil engineering alumni also were continuing to transform the world. William Barclay Parsons, Class of 1882, founded an engineering firm, today's Parsons Brinckerhoff, that early on was international in scope. He was chief surveyor of China's 1,000-mile route from Hankow to Canton (a line still in use today), built docks in Cuba, and was instrumental in the construction of the Panama Canal. During the 1990s, his firm was led by our alumnus, the late Henry Michel '49, who, as president and chairman, oversaw its growth to a thoroughly international firm that now employs 15,000 people world-wide.

Our School today has more than 24,000 living alumni, each of them leaders in their own right. As you will see in the following pages, these featured alumni and students-no matter what their field of endeavor-are having an impact on the way we live our lives, both now and in the future. Please join me in celebrating their achievements.

We also know that there are other Columbia Engineering alumni whose work has left its mark on our daily lives. If you have information about other alumni leaders, please visit our Web site to share your story or the story of a classmate. See page 33.

I look forward to reading all your stories and learning more about the influence of our Columbia engineering and applied science leaders. The original mission of King's College in 1754 was to teach "everything useful for the Comfort, the Convenience and Elegance of Life." For our nearly 150-year history, Columbia Engineering continues to do just that. It is thanks to all of you who are doing your part to keep us faithful to our charter.

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LEADERS MAKING AN IMPACT



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