November, 2014

THE UNIVERSITY OF ANGOLA

In his final years, Gabriele, PhD, Drosdick Endowed Dean of Engineering, recognized that the College of Engineering is on the threshold of a new era—a time when the College has the resources to propel it forward. To move from what could be to what will be—inspiring Gary Augustine to Ignite Change so that the College has the resources to tackle the next frontier of engineering education—requires a commitment from our alumni, students, and friends.

AUGUSTINE WASN’T AN ENGINEER, but he grasped the basic idea: To build high, you have to dig deep. Villanova engineers, who understand the value of a strong foundation, are digging deep—particularly four alumni who have made transformative gifts totaling $21.5 MILLION to propel the College of Engineering in its drive to build for the future.

Indeed, graduates of every age and income bracket are supporting the Greater Greats! The Villanova Campaign to Ignite Change so that the College has the resources to move from what could be to what will be—inspiring Gary Gabriele, PhD, Drosdick Endowed Dean of Engineering, to be more confident than ever about what lies ahead. Gabriele, PhD, Drosdick Endowed Dean of Engineering, to be more confident than ever about what lies ahead.

These investments, the College will thrive for generations to come,” says Dean Gabriele. “That’s one of the most satisfying outcomes of the campaign.”

Building on these four leadership gifts, the College is on its way to achieving critical campaign priorities:

■ With a $3 MILLION commitment from Denise and former Villanova Trustee John Paul Jones III ’72, retired chairman and CEO of Air Products and Chemicals Inc., the Center for Engineering Education and Research (CESR) patio will be enclosed and converted into the state-of-the-art Jones Family Student Learning Commons. Students will flock to this 4,600-square-foot communal atrium to study in groups, work on multidisciplinary team projects, and attend seminars and guest lectures. The space will be an ideal venue in which the College and University can host special events.

■ Villanova trustee Nance Dicciani, PhD ’69, retired president and CEO of the Specialty Materials Division, Honeywell International Inc., has committed $2.5 MILLION to establish the Nance K. Dicciani PhD ’69 Endowed Chair in Chemical Engineering. The funds will enable the department to attract renowned teacher-scholars, invest in curricular development, and raise Villanova’s visibility as a leader in research and scholarship in critical and emerging areas of chemical engineering.

■ Experiential and collaborative learning will reach new heights, thanks to a $2.5 MILLION commitment from Gloria J. and John G. “Jack” Drosdick ’65, retired president and CEO of Sunoco Inc., and a former chair of Villanova’s Board of Trustees. The couple’s gift will fund the new Engineering Innovation Lab, housed in CEER. In this two-story, 3,300-square-foot, high-bay space equipped with an overhead crane, students will tackle scalable, real-world projects and carry out research.

■ Alliances with the Panama Canal Authority (ACP), which is nearing the end of its multibillion-dollar project to double the canal’s capacity, has exposed Villanova engineers to hands-on and behind-the-scenes experiences. In 2012, then CEO Alberto Alejandria came to campus to share insights on the canal’s expansion. The ACP also offers internships to Villanova students. And, as the final leg of their service-learning trips, participants enjoy a special tour of the construction of the canal’s new locks.

To our students and faculty, both current and future, this endowment plan with the City of Knowledge, a collaboration of the Panama Canal Authority and other enterprises.

Public and private sectors that promote sustainable development in Panama. They also are pursuing similar initiatives with the Panama City mayor’s office and the Universidad Católica Santa María La Antigua.

In addition, the College hopes to partner with the City of Knowledge on faculty-led telehealth projects. It would likely to formalize collaboration in the broader area of telemedicine with the Universidad Tecnológica de Panamá as well.

MISSION-RELATED PROJECTS

Engineers making service-learning trips to Panama in the 1990s repaired water distribution systems, helped to build bridges and schools, and installed solar lighting at the mission.

In recent years, the College has incorporated more design and analysis into its work. In 2010, faculty and students began to develop a Water Resources Master Plan for the Cachaza region. This multiyear project—the focus of a water resources design course—will ensure that the growing population, now at about 8,000, will have a steady supply of clean water, even in the dry season. The comprehensive plan supports raising the dam and expanding the reservoir.

In another capstone course, a team of students designed a bridge that will provide maintenance trucks access to the reservoir’s dam during the rainy season. When the swollen river makes the road impassable, the team has been selected as one of three finalists in the national Student Structural Design Competition. 

In addition to the three water systems it already supports, the College agreed in March to help design a fourth that will serve a new residential cluster.

ACADEMIC AND MUNICIPAL COLLABORATIONS

Faculty are spearheading efforts to develop a stormwater management plan with the City of Knowledge, a collaboration of the public and private sectors that promotes sustainable development in Panama. They also are pursuing similar initiatives with the Panama City mayor’s office and the Universidad Católica Santa María La Antigua.

In addition, the College hopes to partner with the City of Knowledge on faculty-led telehealth projects. It would likely to formalize collaboration in the broader area of telemedicine with the Universidad Tecnológica de Panamá as well.

ALLIANCES WITH PANAMA CANAL AUTHORITY

A strong relationship with the Panama Canal Authority (ACP), which is nearing the end of its multibillion-dollar project to double the canal’s capacity, has exposed Villanova engineers to hands-on and behind-the-scenes experiences. In 2012, then CEO Alberto Alejandria came to campus to share insights on the canal’s expansion. The ACP also offers internships to Villanova students. And, as the final leg of their service-learning trips, participants enjoy a special tour of the construction of the canal’s new locks.

Knowledgeable, well-connected alumni living in the region have helped to forge many of the liaisons. These Villanovans will continue to play critical roles as the University explores new opportunities to engage in Panama.