

# Panamanian CONNECTION

Six months after graduating, Christopher McCartin '91 COE traveled to Wacuco, Panama, to volunteer at a mission run by the Rev. Pablo "Wally" Kasuboski. His journey sowed the seeds for what has grown into a fruitful, transcontinental relationship between the College of Engineering and Panamanian partners.

Almost 25 years later, scores of faculty, students, administrators and alumni have gone to the Central American republic, not only to provide engineering services for Father Wally's infrastructural projects, but also to work with universities, government, the Panama Canal Authority and other enterprises.

The engineers are not alone in representing Villanova. Their initiatives have led colleagues in the College of Nursing, the Villanova School of Business, and the College of Liberal Arts and Sciences to share their expertise to improve the quality of life, spur economic development and educate residents in Panamanian communities.

## MISSION-RELATED PROJECTS

Engineers making service-learning trips to Panama in the 1990s repaired water distribution systems, helped to build bridges and chapels, 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 Cañazas 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 give maintenance trucks access to the reservoir's dam during the rainy season, when the swollen river makes the road crossing to the dam 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 like 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 Alemán Zubieta 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. ■

