

2011 - 2012 ANNUAL REPORT

INNOVATION STARTS HERE.





Table of Contents

- 2** Message From the Dean
- 3** Local Significance
Dr. Jennifer Kadlowec and Dr. Eric Constans
- 7** Regional Impact
Dr. Robi Polikar
- 11** National Influence
Gemma Peebles, '13
- 15** International Scope
Dr. Stephanie Farrell
- 19** Innovation Starts Here
Dean's Advisory Council
- 21** With Gratitude

Message From the Dean

June 17, 2012: This date is noteworthy to residents of this region because it marked the 20th anniversary of the \$100 million gift from Henry and Betty Rowan to then-Glassboro State College.

This gift — the largest ever given to a public institution of higher education at that time — was transformational not only for the school but also for the South Jersey region. The Rowan Gift funded our College of Engineering and spurred other initiatives. During the 20 years since Henry and Betty Rowan announced their commitment to our school, the Rowan University College of Engineering built its reputation as a groundbreaking engineering program. Through the innovative activities of faculty, staff and students, the school has broadened its reach globally and has made a difference locally, regionally, nationally and internationally.

This revolutionary era continues. In August 2012, the Cooper Medical School of Rowan University — cofounded by Rowan and The Cooper Health System — welcomed its inaugural class. However, the doors for collaboration already had opened for our engineering faculty members and Cooper physicians long before this milestone. The mobile health unit project (see pg. 5), which will provide pro bono health care screening in needy communities and other health-related services, is just one example of the powerful influence that this partnership will have on the region.

Our engineering faculty members continue to collaborate with other institutions in the region to solve the important challenges of today, as diverse as rainwater runoff and Alzheimer's disease.

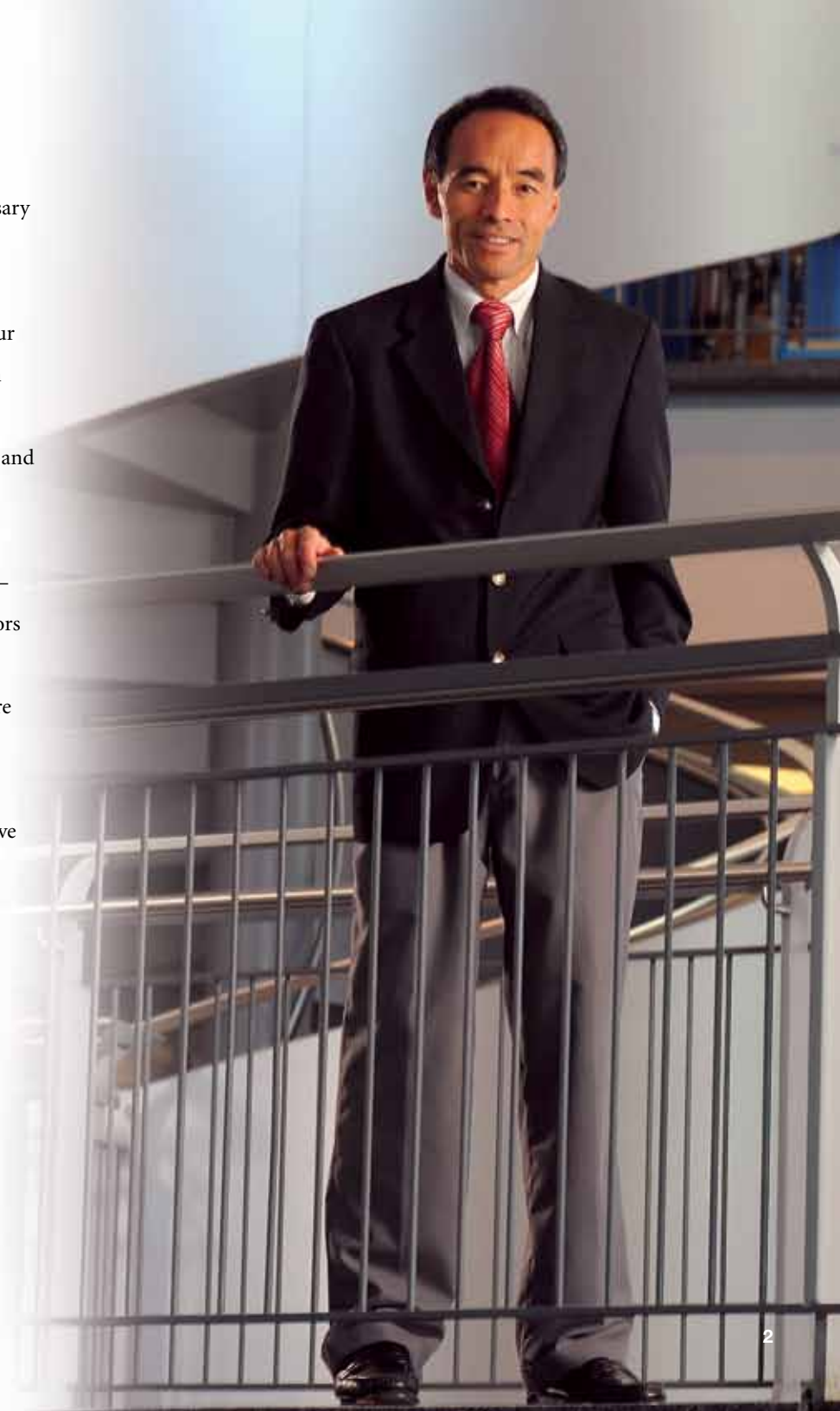
Through these and other projects detailed in this annual report, our students are learning to become the next generation of leaders and technology innovators to meet local, regional, national and international needs.

Moreover, our faculty members have become global ambassadors for a hands-on, minds-on approach to engineering education in faraway countries such as Kazakhstan.

Innovation starts here. Please visit us on campus so that we can share ideas about collaborative opportunities that will spark future innovations! ■



Steven Chin, Ph.D., P.E.
Interim Dean





Dr. Jennifer Kadlowec and Dr. Eric Constans

Recognizing the reputation of Rowan's engineering clinic program, Cooper University Hospital asked the College to design a mobile health unit that would deliver health care services to people where they live and work.

Dr. Jennifer Kadlowec, professor of mechanical engineering, and Dr. Eric Constans, associate professor and chair of Mechanical Engineering, led a group of undergraduate students who produced the designs that will help make this concept a reality. ■

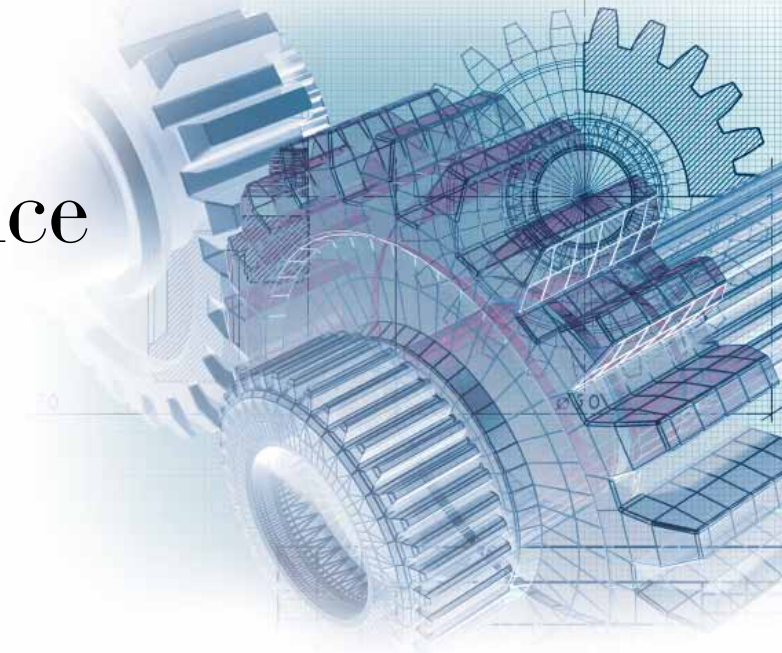
Local Significance

The Rowan University College of Engineering continues to build partnerships to fuel the local economy and inspire students to join the profession of engineering.

With its ongoing commitment to STEM (science, technology, engineering and math) education, the College offers an array of programs designed to spark K-12 students' interest in these fields. This year the College launched the BEST (Boys' Engineering, Science and Technology) Workshop for middle school boys to complement its long-standing middle school girls' program (AWE — Attracting Women Into Engineering). They are just two of many programs that introduce students to the excitement of engineering.

Student and faculty teams also are developing solutions to a spectrum of local problems through the College's unique interdisciplinary engineering clinic program. Their efforts, similar to those associated with the mobile health unit, benefit the local community and beyond. ■

Dr. Mary Staehle teaches students attending the BEST Workshop about freshwater flatworms called planaria.



Taking Health Care Into the Community


Most people take for granted simple preventive health measures like rolling up their sleeves for flu shots. But some community members are not so lucky, lacking access to the basic health care services they need.

Seeking a solution to this problem, Cooper University Hospital approached the College of Engineering.

“Cooper wanted to create a mobile health unit that would go out into the community and perform community service activities,” said Dr. Jennifer Kadlowec, professor of mechanical engineering.

Recognizing the range of skills offered by the Rowan Engineering clinic program, Cooper officials requested assistance in retrofitting a 55-foot trailer into a mobile health unit that will deliver vital health care services to underserved residents in the area and provide select testing during corporate wellness events.

“The design aspect fit within the types of things our students can accomplish, and it seemed like a good mesh between the hospital’s needs and our students’ skills,” Kadlowec said.



Dr. Eric Constans and Dr. Jennifer Kadlowec view a SolidWorks 3D CAD rendering of the proposed mobile health unit.

Shaping a Plan

Taking its lead from the health system, an undergraduate team developed the designs that will transform the trailer, under the direction of Kadlowec and Dr. Eric Constans, associate professor and chair of Mechanical Engineering.

Using SolidWorks three-dimensional, computer-aided design software, students planned the interior of the compact unit, which will feature examination rooms, office space, a restroom and a waiting area.

As students developed the proposal, they ensured compliance with a range of specifications. “They considered factors such as safety regulations and standards, workplace design and storage of equipment for ease of use,” Kadlowec said.

Furthermore, based on a list of required instruments and devices for the mobile health unit, students identified storage and transportation requirements for the fragile equipment. “We researched which items might be delicate and need shockproofing and how to make them safely transportable,” Constans said.

Taking it to the Street

The mobile health unit will provide pro bono health care services in the community and fee-based corporate wellness screenings, which will help fund the free care.

During the spring semester, College of Engineering students teamed with Rowan’s Rohrer College of Business students, who created a business plan related to the project, performed a cost analysis and explored long-term sustainability.

The mechanical engineering students are gaining valuable real-world experience from the project. “They were able to put together a design and a set of CAD drawings pretty quickly,” Constans said. “They also made a convincing presentation to the Cooper staff with the CAD files that they had generated.”

Students and faculty enthusiastically embraced this mission.

“We’re all idealistic,” Constans said. “We like the community health focus. The fact that the mobile unit will be able to serve the community is a good thing.” ■

NEW MEDICAL SCHOOL OPENS ITS DOORS

Cooper Medical School of Rowan University (CMSRU) officially opened its doors on July 24, offering new health care educational resources to South Jersey and an unlimited number of new collaborative opportunities to the Rowan University College of Engineering.

The six-story, 200,000-square-foot, state-of-the-art medical education building features 25 active learning rooms, a satellite medical library, a clinical simulation center, research and teaching laboratories, and other facilities. The first class of 50 medical students entered the school in August.

Long before the medical school opened its doors, the College of Engineering faculty began weaving strong connections with CMSRU, as the medical school appointed six Rowan Engineering professors to its faculty. The professors represent each engineering program at the College — Chemical, Civil and Environmental, Electrical and Computer, and Mechanical Engineering.

This partnership will fuel a wide array of research advances at the University in areas such as biomedical engineering, systems engineering, computational intelligence, bioinformatics, bioremediation and diagnostic data mining. ■



Dr. Robi Polikar

Dr. Robi Polikar, professor and chair of Electrical and Computer Engineering, continues to research the early detection of Alzheimer's disease in collaboration with the University of Pennsylvania, as well as signal processing, pattern recognition, neural systems and machine learning. ■



Regional Impact

The impact of research conducted at the Rowan University College of Engineering reverberates throughout the region.

For example, based on a \$330,000 grant from the New Jersey Department of Environmental Protection Division of Watershed Management in conjunction with the Gloucester and Camden County Conservation Districts, Dr. Jess Everett, professor of civil and environmental engineering at the University; Dr. Clay Emerson, '00, of Princeton Hydro in Sicklerville, N.J.; and engineering clinic students have designed rain gardens and bio-infiltration basins on the Glassboro campus to manage rainwater runoff. The gardens will serve as a demonstration site in the two counties for future projects.

College of Engineering faculty members also are forming vital connections with researchers at universities within the region, empowering them to collaborate on essential investigations. Such partnerships will enable these institutions to capitalize on each other's strengths. ■



Dr. Jess Everett stands before the first phase of a bioretention basin across from Rowan Hall that he and students designed last spring.



Making Collaborative Connections

More than a century after researchers first described Alzheimer's disease, Dr. Robi Polikar, professor and chair of Electrical and Computer Engineering, is one of many researchers working to unravel the enduring mysteries that shroud the debilitating illness.

Polikar began his Alzheimer's research in graduate school almost two decades ago, but the magnitude of the disorder continues to propel his work. "Alzheimer's is an increasingly prevalent disease and more so as our senior population ages and lives longer," he said.

Analyzing Evidence

In the effort to address these complex problems, researchers' connections with their colleagues are indispensable. Polikar has partnered with the University of Pennsylvania in research to pinpoint the elusive early signs of Alzheimer's disease with automated techniques — an important piece of the puzzle in treating patients.

"Even though there is no cure for Alzheimer's disease yet, there are approved drugs that have limited benefits," Polikar said. "They can slow down the progression of the disease. They can help people deal with the symptoms, at least for a certain period of time. The earlier that you diagnose the disease, the more effective some of these drugs are."

Dr. Robi Polikar (left) and Karl Dyer, '10, an electrical and computer engineering graduate student, discuss their work to develop novel computational intelligence and machine learning approaches for automated analysis of large volumes of data.

Technologies such as magnetic resonance imaging, positron emission tomography and electroencephalograms do not provide definitive answers. “The question then becomes, can we look at a variety of different biomarkers and combine them in such a way that we get a better diagnostic accuracy than we can with each of these modalities alone?” he said.

To accomplish this, Polikar and his students are analyzing clinical data from the University of Pennsylvania, capitalizing on the strengths of both institutions. “They have a very active and successful memory disorders clinic and an Alzheimer’s disease research center, and we can look at these data to see whether we can improve the diagnostic accuracy using a variety of these computational, mathematical or engineering approaches,” Polikar said.

Strengthening Research

Polikar also has relied on research connections with Drexel University. In his work on machine learning and computational intelligence, he collaborates with one of his former students, a doctoral candidate at the university. He also has partnered with Drexel researchers on pain assessment studies and his earlier Alzheimer’s disease research.

Such partnerships augment research immeasurably, enabling investigators to share resources, data and insights. “Everybody brings a different level of expertise and area of knowledge to the table,” Polikar said. ■

Dr. Robi Polikar; John LaRocco, M’11 (now a Ph.D. student at the University of Canterbury, Christchurch, New Zealand); and Nickolas Kowalski, ’12, electrical and computer engineering graduate student (counterclockwise), worked on a brain-computer interface experiment designed to allow people to control electronic or mechanical devices and components by using only their brain waves.

TRANSLATING BRAIN WAVES

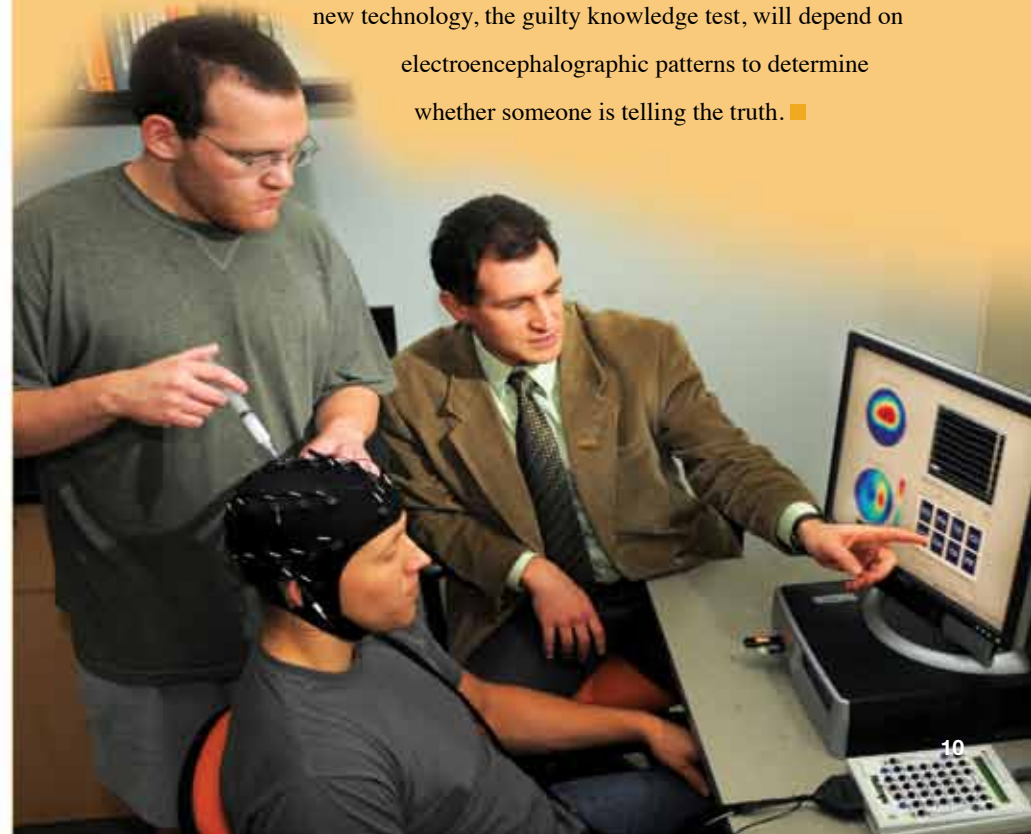
Dr. Robi Polikar, professor and chair of Electrical and Computer Engineering, and his students also continue to use computer technology to probe other mysteries of the human brain as they evaluate the role of brain waves in communication.

“Researchers have found that certain thoughts can generate certain signals,” he said. For example, if someone wants to squeeze a tennis ball with his or her left hand, the intention generates a different pattern than if he or she wants to use the right hand.

“If that’s the case, then we can ask a paralyzed person to think such thoughts when he or she wants to move an object or perhaps a joystick that controls a wheelchair,” he said.

Polikar and his students continue to study applications for this information. In new research, Polikar and his team are investigating an application that someday could replace the traditional polygraph test, which relies on skin resistance. The

new technology, the guilty knowledge test, will depend on electroencephalographic patterns to determine whether someone is telling the truth. ■



Gemma Peebles, '13

An Air Force ROTC cadet and civil and environmental engineering major from East Windsor, N.J., Gemma Peebles received the Society of American Military Engineers Award for her detachment. She is a member of the Engineers Without Borders USA Rowan University Student Chapter and the Catholic Campus Ministry at Rowan University.

Upon graduation, Peebles will become a second lieutenant in the United States Air Force. ■



National Influence

Supported by grants from a range of federal agencies, Rowan Engineering's nationally recognized faculty and students continue to solve problems that challenge the nation.

For example, Dr. Ying (Gina) Tang, associate professor of electrical and computer engineering, and her students created a new Internet-based virtual reality game system designed to draw students to science and technology careers. This project was funded by a three-year, \$250,000 grant awarded by the National Science Foundation in 2010.

As researchers explore energy options, Dr. Kauser Jahan, professor of civil and environmental engineering, and her colleagues and students are studying the role of algae as a more sustainable alternative to biodiesel fuel. This research is being funded by a \$750,000 grant from the United States Department of Energy.

Resourceful teams in the College of Engineering continue to target problems that test the country. ■

Dr. Gina Tang instructs Bridgeton High School students on a learning game developed by Rowan electrical and computer engineering students to promote engineering at the K-12 level.





Preparing for Launch

Gemma Peebles' life mission took root long before she set foot on campus. After her arrival, however, her extracurricular activities — Air Force ROTC (AFROTC), the Rowan University Student Chapter of Engineers Without Borders USA (EWB-USA Rowan) and Catholic Campus Ministry — helped shape the engineering goals that would help her live that mission.

“Both my grandfathers and my dad were in the Army, so I grew up with the mentality that you have to give something back,” said Peebles, '13, a civil and environmental engineering major. “I'm thankful to live in this country and I'm thankful for all of its freedoms, so I knew going into college that I wanted to do something in the military.”

Laying the Foundation

She credits the AFROTC with providing the necessary skills for her future as a second lieutenant in the Air Force. “As a cadet in AFROTC, I'm learning the kind of management and leadership skills I'm going to need to work with people and get everyone to work together to complete a goal or mission,” she said.

When she learned about EWB-USA Rowan, she realized that she shared many of the organization's goals. “When I found that we would be going to developing countries and helping people with EWB, it was really exciting because I realized I could make a career out of this.” She gained her first hands-on humanitarian experience through EWB-USA Rowan. During the



Andrea McFarland, '14 (middle), a civil and environmental engineering major, and Gemma Peebles (right) spend time with a resident and her baby during their trip to The Gambia.

January 2012 student chapter trip to The Gambia, in Africa, she was part of a Rowan team that continued monitoring a road project that began three years ago. During earlier trips, students surveyed and created an elevated design for an often-flooded roadway, which is a vital pathway in the region.

Peebles is impressed by EWB-USA's focus on sustainability. "It really brings to life the saying, 'Give a man a fish and he will be fed for a day, but teach him how to fish and he will never go hungry,'" Peebles said.

Looking Ahead

She looks forward to serving on humanitarian missions in the Air Force. "It won't be everything I do, but one of the missions of the military is to help people, so whether it's assisting a recovery effort after a natural disaster or filling up sandbags in preparation for one, as a civil engineer I could be one of the people called to do that," Peebles said.

Peebles' ideals have strongly influenced her. "Being involved in EWB, AFROTC and Catholic Campus Ministry has really helped me focus my goals as a civil engineer and as a person." ■

CAPTURING NATIONAL RECOGNITION

In April, the Rowan Engineering Society of Automotive Engineers (SAE) Baja team earned 17th place out of 105 teams at the 2012 Baja SAE Auburn competition at Auburn University in Alabama. For the contest, the student team designed and built an off-road vehicle to be considered for manufacture by a fictitious company.

"We did way better than we have ever done before with this year's team," said Dr. Eric Constans, chair of Mechanical Engineering and team advisor.

A second Rowan Engineering team scored ninth overall in a field of 32 competitors in the 2012 SAE Supermileage® Competition in Marshall, Mich., designing and constructing a single-person, 239-mpg vehicle.



Such competitions provide extensive design and project-management experience. "We got a feel for how it is to really design something by yourself and have to troubleshoot, rebuild and rethink everything and go back to the drawing board to make improvements," said Supermileage® team member Mike Davies, '13, a mechanical engineering major from Mt. Laurel, N.J.

The intense competitive environment drives students much further than a typical classroom experience. "It gives students the perspective of how to perform engineering under a huge time constraint, under a huge budget constraint and under a very specific set of rules," said Dr. Krishan Bhatia, co-advisor of both teams and associate professor of mechanical engineering. ■

(Above) Michael Davies, '13; John Himics, '13; and William Urban, '13 (left to right), assess their Supermileage® car with Dr. Eric Constans (second from left) as James Tilden, '13, drives the vehicle.

Dr. Stephanie Farrell

Dr. Stephanie Farrell, associate professor of chemical engineering, was invited to co-lead the workshop “Proven Strategies of Effective Teaching” at Jawaharlal Nehru Technological University in Kakinada, Andhra Pradesh, India, in January 2012, which was part of the Indo-U.S. Collaboration for Engineering Education. Farrell also has traveled to Kazakhstan, representing the American Society for Engineering Education and Rowan University in discussions on educational collaborations with the country. ■



International Scope

The College of Engineering continues to engage in research with a universal impact, with faculty members sharing their passion, investigations and insights with the global community.

As Rowan Engineering students prepare to compete in a global workforce, they are developing solutions to problems challenging populations far beyond U.S. borders while forging international connections. In 2011-12, teams from the Rowan University Student Chapter of Engineers Without Borders USA traveled to La Ceiba, El Salvador, in Central America, as part of an ongoing water project, and to The Gambia, in Africa, to monitor a vital roadway in the region.

Through Engineering Innovators Without Borders, students and faculty create inventions that will improve living conditions in developing nations.

As the focus on international networks becomes increasingly important, the College of Engineering continues to broaden its research and programs to prepare engineers for worldwide challenges. ■

Forming Global Ties

As the Rowan University College of Engineering equips the next generation of engineers to compete and work on a global platform, Dr. Stephanie Farrell is strengthening connections with her colleagues abroad.

A highlight of her overseas discussions is the College's signature hands-on, minds-on approach to education as exhibited in engineering clinics and more.

"I'm interested in exploring how we can transfer some of the educational practices we have here," said Farrell, associate professor of chemical engineering. "How can we take the best of what we are doing and give other countries the access to it when they have different educational systems, resources and budgets?"



Dr. Stephanie Farrell visits with three girls in the rural countryside outside Khimsar, Rajasthan, India.



While in India, Dr. Stephanie Farrell visited the ghost village of Kuldhara.

Advancing Hands-On Learning

In January 2012, Farrell traveled to Jawaharlal Nehru Technological University in Kakinada, a city in the southeastern portion of India, to co-lead two workshops sponsored by the Indo-U.S. Collaboration for Engineering Education (IUCEE). During the workshops, she and a colleague trained faculty on effective teaching strategies, discussing project-based learning and other inductive-teaching methods.

Farrell and a number of international colleagues also shared similar ideas in Kazakhstan, an industrialized nation in Central Asia, which is working diligently to elevate its level of education. She visited Kazakhstan in July 2010 and October 2011, when she spoke at a symposium on the establishment of research institutions in the country. In March 2012, she visited Al-Farabi Kazakh National University (KazNU) in Almaty, Kazakhstan, with the American Committee for Global Education to establish a major faculty and infrastructure development initiative in Kazakhstan and Central Asia. Part of this initiative includes the expansion of IUCEE to include Kazakhstan and Central Asia.

Participants were energized by the concept of project-based learning, but they assumed this pedagogy is most appropriate for master's-level courses. Farrell urged them to follow Rowan's lead — offering freshmen these experiences so they can learn by doing.

"I gave one professor some examples of projects that we have done here, and his eyes just lit up," she said. "It was so amazing to see that the lightbulb went on. All of a sudden, he could see that this was possible."

Fostering Collaborations

In June 2012, Farrell brought five graduate students from Kazakhstan to work in her lab. Three of the students gained expertise in biodiesel production and project-based learning and also were trained to assist with a project-based course on biofuels at KazNU. The other two students performed drug-delivery research under two of Rowan Engineering's National Science Foundation grants. The latter two students will stay for the fall semester, when they will be joined by two more master's students.

Such collaborations benefit the programs at Rowan and in Kazakhstan. “Our students are going to have exposure to international students, which makes a more diverse student body, and they will be exposed to new ideas,” she said. “It also gives Rowan good exposure because students from Kazakhstan will go back to Kazakhstan and talk about Rowan.”

Uniting the Global Community

Global engineering is the focus of the future.

“We don’t just work in our backyards anymore,” Farrell said. “We work all around the world. And the projects that we work on, even if we are working on a project in New Jersey, chances are it’s going to have impact worldwide. But more and more, engineers are very mobile and they have to work in multicultural environments.” ■



Dr. Stephanie Farrell and Balzhan Ashim, Albina Belgibayeva and Saltanat Kozbakarova (left to right), research interns from Kazakhstan, produced biodiesel fuel from waste vegetable oil and used it to run a generator.

LENDING INTERNATIONAL AID

It’s not unusual to find Caitlin Terry, ’05, in an airport — but she won’t be headed for a balmy beach. Rather, she’s likely to be loaded down with metal tubing, drill bits and other manual drilling equipment that will help bring safe water to communities in developing countries.

So far, the Vineland, N.J., resident’s travels have taken her to Guatemala, Tajikistan, Sudan, Nepal, Haiti and Uganda, where she has drilled wells, built pumps, constructed latrines and taught locals how to perform these tasks and maintain these systems themselves.

“Every minute I’m there I’m focused on what I can do to help, whether it’s in just drilling alone or trying to figure out other solutions,” said Terry, a civil engineer

for the Shaw Group Inc. in Moorestown, N.J.

Terry has many memories from her trips, but one stands out from her first project in Guatemala. As residents she had worked with pumped water from a new well, excitement shone in their faces. “They had a sense of ownership, accomplishment and pride in being able to provide for their families this new safe water,” she said. “I think that’s going to be one of my favorite moments.” ■



Caitlin Terry stands with the men she trained in drilling in Kaloko village in the district of Bukedea in eastern Uganda.



Students participating in the RISE (Rowan's Introduction for Students to Engineering) program build bottle rockets as members of the Dean's Advisory Council observe.

Innovation Starts Here

The United States has long been a global leader in economic growth. Our country did not attain this distinction through luck but from the hard work of talented and motivated individuals and teams who created timely solutions to problems on many levels and many fronts.



RISE students and members of the Dean's Advisory Council watch the launch of a student-built bottle rocket.

Henry M. Rowan is a remarkable example of this. He achieved tremendous success, launching a small company and developing it into an international firm that advanced his clients and customers, the local and national economy, and the international market. As Mr. Rowan stated in his book *The Fire Within*, "Every job, every concept and detail represented the challenge to do something that had never been done before." He also wrote, "... Every departure from conventional thinking represented a new risk, and it had been our success at innovating and risk-taking that had built Inductotherm."

Mr. Rowan's pioneering spirit continues to propel the Rowan University College of Engineering that his 1992 gift of \$100 million made possible. This groundbreaking school fosters a culture of innovation based on technical knowledge and fundamentals, team efforts, interdisciplinary problem solving and hard work with both the mind and hands. Furthermore, the College inspires the engineers of tomorrow to promote advances in our world as they strive to become our future leaders.

None of this would be possible unless students develop sound engineering practices and become proficient in their chosen fields of work. Rowan Engineering has established a solid reputation for producing engineers with technical expertise in chemical, civil and environmental, electrical and computer, and mechanical engineering. The combination of foundational knowledge and the innovation culture promoted by the Rowan Engineering faculty is a great recipe for success at the individual level and beyond. Without these building blocks, success would be elusive.

The pioneering innovative spirit is alive and well at Rowan University and is the underpinning of the successful development and empowerment of engineers to go forth and tackle the challenges of the future. ■

John Jones, P.E., Chair
Dean's Advisory Council

Lisa Morina, Co-Chair



With Gratitude

Thank you to our generous donors who help make the Rowan University College of Engineering one of the most respected engineering schools in the country.



Our 2011-12 donors include the following:

Engineering Alumni

David J. Bound, '08
David, '01, M'03, and
Christina M. Bowen, '01
David M. Browning, '02
Michael J. Burg, '01
Jason K. Daniel, '00
Desiree Deshmukh, '03, M'04
Paul J., '08, and April Diglio
Christopher W., '00, M'03, and
Maryanne Dromgoole, '01
Clay H. Emerson, '00
Mark J. Farwell, '01
Daniel M. Fichana, '04, M'06
Kyle Gandy, M'10
Ken Gemmell, '00
Gregg H. Green, M'01
William C. Hill, '07
Jonathan Hogg, '10
Terrance J., '08, and Susan Hopely
Joseph D. Horton, '09
Peter Mark Jansson, M'97
Christopher, '03, M'04, and Brianne
Kanach, '02
Edward Lucas, '07
Kevin A. Martin, '00
Kelli Lynn Martino, '11
Paul Andrew Meyer, M'07
James and Catherine Ann Ni, '00
Peter E. Renner, '07

Xavier Rose, '08
Manning J. Smith IV, '05
Brian E. and Claire D. Steager, '00, M'02
Joseph J. Switzer, '01
Jessica Tryner, '11
Timothy L. Vaughn, '05, M'06
Thomas Xenakis, '00

Parents, Staff and Friends

Sujata Amritkar
Wanda Balog
John and Melanie Basantis
Betty Boros-Russo
Maurico Borrero
Jack and Joanne Boyle
Robert G. Carullo
Glenn and Lorraine M. Chapman
Steven and Jacqueline Mae Chin
Douglas Cleary and Karen Joyce
Geneva A. Coffee
Bernard D. DeMarinis
C. Bland Dickey and
Lethea A. Hammon
Dianne Dorland
Stephen R. Drozdow
Jeanne R. Dunn
Redmond English and Jennifer Kay
Deanne P. Farrell
Michael Fischette
Albert A., Jr., and Caroline Fralinger
Donald and Zenaida Otero Gephardt
Stephanie A. Gettings

Melinda J. Grant
Amy Guns
Gary S. and Vivian J. Haes
Toni M. Halsey
Cheryl Hauske
Linda Head
Roberto L. and Ana Hernandez
Robert Paul and Fiona L. Hesketh
John R. Jones
Jennifer Kadlowec
Kim A. Kelly
Yusuf and Munira Mehta
Thomas Merrill
Daniel and Arlene Miller
Katherine Montgomery
Lisa Morina, '87
John H., P.E., and Katherine E. Mortimer
Lisa Oliver
Maria Perez-Colon, M'08
Frances R. Pierce
Patricia A. Quigley, '78, M'03
Henry Rowan
Keith H. Sansalone, '76
Derrick S. Seibert
Pamela H. Sertich
Sean and Eileen C. Sheehy
Manning J. III and Virginia Rowan Smith
Mary M. Staehle
Fangqiu Sun
James H. and Fay Ann Tracey
Srinivasan Vanchinathan and
Beena Sukumaran
Laura R. Van Embden, '70

Alexis J. Wesley
Hong Zhang

Organizations

ABF Direct LLC
American Aerospace Advisors Inc.
The Boeing Co.
Concord Engineering Group Inc.
Consulting Engineer Services Inc.
Exxon Education Foundation
Fidelity Charitable Gift Fund
FocalCool LLC
FORCE Retirees' Local 2373
Hershey Foods Corp.
Lincoln Electric Co.
Lockheed Martin Corp.
Martinson Family Foundation and
Edison Ventures
Mickleton Monthly Meeting
PB's Tavern Grille
Professional Engineering Society
of Southern NJ Inc.
PSEG
Rotary Club of Washington Township
Henry M. Rowan Family Foundation
South Jersey Industries
Verizon Foundation
Wal-Mart Foundation



Twenty years ago, South Jersey entrepreneur and businessman Henry Rowan and his wife, Betty, made an unprecedented gift in the realm of public higher education to then-Glassboro State College: \$100 million.

Their only requirement was that the institution create a College of Engineering that transformed engineering education and served the students of our region — and ultimately South Jersey.

The Rowan Gift, reflective of overwhelming generosity and great vision, did indeed contribute to the founding of what is now Rowan University's College of Engineering. That gift also spurred greater involvement — and many contributions — from other individuals and companies.

Today, the Rowan College of Engineering offers award-winning programs that provide a first-rate education for its students and prepare them to be competitive in the work world. The contributions of the Rowan family and so many more have made this possible.



Henry M. Rowan Hall
201 Mullica Hill Road • Glassboro, N.J. 08028
tel: 856-256-5300 • fax: 856-256-5350
E-mail: engineering@rowan.edu • www.rowan.edu/engineering

