BY DANNY FREEDMAN

Coloring Outside the Lines

A NEW SCHOLARSHIP IS OFFERING MUCH MORE THAN MONEY—IT IS A REDESIGNED BLUEPRINT FOR EDUCATING ENGINEERS.

MOLLY OLSEN

Hometown: Liberty, N.Y.
Major: Civil Engineering
Ten years from now: I want sustainability to be a subconscious thought in construction. Rather than celebrating the environmentally friendly features of buildings, I hope to see them become requirements.
The problem I'd most like to solve: I come from a small town in upstate New York with an extremely high dropout rate in high school, and it happens all over the country. I believe that an education is one of the strongest tools a young adult can acquire, and everyone should be required to have the knowledge and skills that a high school education provides.

LIAM CUSACK

Hometown: Burlington, N.J.
Major: Systems Engineering
Ten years from now: I would like to be working in either defense or financial analysis. I hope to have received my master's in systems engineering, and possibly to move to the West Coast.
The problem I'd most like to solve: Vulnerability to cyberattacks by foreign nations. There is a lot of sensitive information out there and, unfortunately, a lot of very smart people trying to get their hands on it. I would like to make sure there is a system in place that not only protects this information but tracks it in the event that it is stolen.

SARAH ROOD

Hometown: Chagrin Falls, Ohio
Major: Biomedical Engineering
Ten years from now: I will likely be working on tissue regeneration and developing artificial organs for the health care industry.
The problem I'd most like to solve: The deterioration of the body, especially in the brain, as a person ages. As I viewed firsthand in my grandmother, who suffered from dementia and Alzheimer's disease, quality of life drastically declines as cells age and deteriorate. I hope to make a breakthrough in the field of tissue regeneration and help improve the lives of those who are aging, as well as those suffering from diseases that cause tissues to break down.

One plays the French horn, another is on the crew team, and another sings a cappella; some already have their hands in research, others in mentoring and entrepreneurship. And this past year, as the inaugural class of A. James Clark Engineering Scholars, these half-dozen students (now rising juniors) also began receiving rigorous training in the fundamentals of leadership.

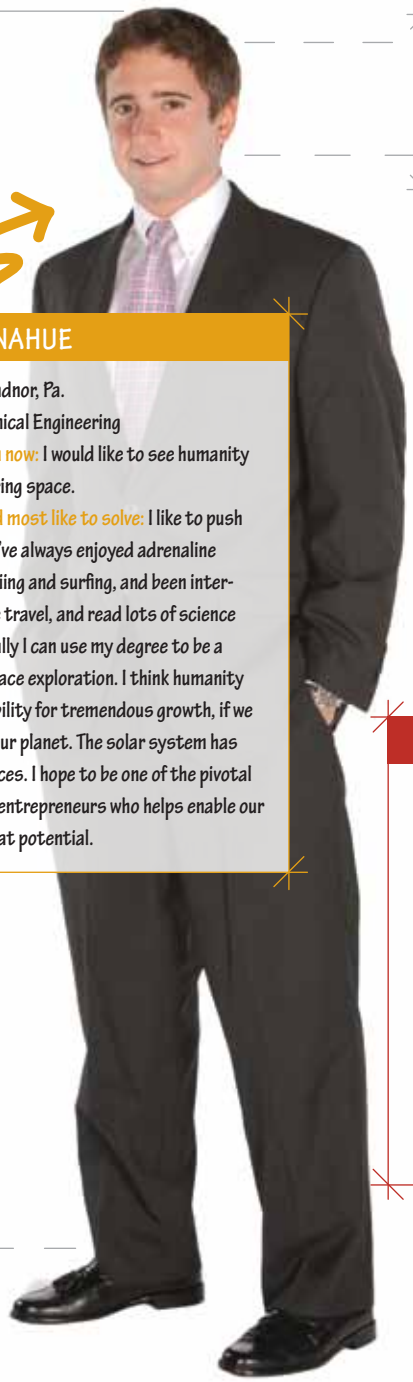
"I think a lot of people have the view that leaders are born, but most leaders that we talk to say leaders are created; that you can learn to be a leader," says David Dolling, dean of the School of Engineering and Applied Science.

The program homes in on the dean's goal of graduating students that look like "an uppercase T," he says. The vertical column is technical expertise. The horizontal bar on top represents an understanding of "the bigger picture," he says, "and the bigger picture is in some way the softer side of life … how to work with people and understand how the world works."

The enterprise was created with an $8 million gift from local entrepreneur and GW trustee emeritus A. James Clark, board chairman and CEO of Clark Enterprises Inc., one of the nation's largest privately held companies and the parent holding company of Clark Construction Group LLC.

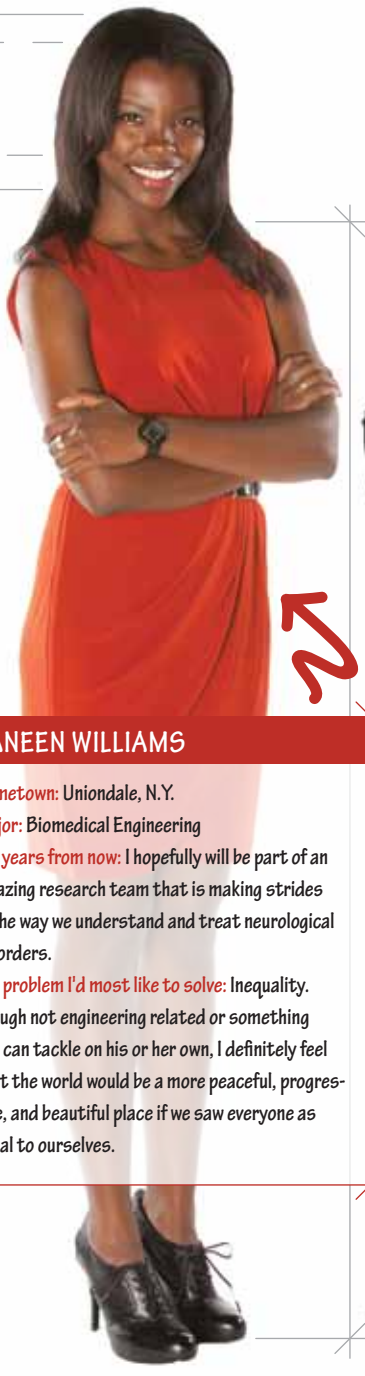
Dean Dolling describes the program as "an immersion experience." Clark Scholars take on internships, spend a semester studying abroad, and attend a leadership "boot camp." Other events this year included a talk by Anousheh Ansari, MS '92, the first female private space explorer and chief executive officer of Prodea Systems.

"When you meet a group of students like this," says Dean Dolling, "you realize that the world will be in good hands. They're energetic, they're responsible, they're wanting to learn, they're wanting to do good things." GW



JOHN DONAHUE

Hometown: Radnor, Pa.
Major: Mechanical Engineering
Ten years from now: I would like to see humanity actively exploring space.
The problem I'd most like to solve: I like to push the envelope. I've always enjoyed adrenaline sports, like skiing and surfing, and been interested in space travel, and read lots of science fiction. Hopefully I can use my degree to be a vanguard in space exploration. I think humanity has the possibility for tremendous growth, if we dare to leave our planet. The solar system has infinite resources. I hope to be one of the pivotal explorers and entrepreneurs who helps enable our race to find that potential.



JANEEN WILLIAMS

Hometown: Uniondale, N.Y.
Major: Biomedical Engineering
Ten years from now: I hopefully will be part of an amazing research team that is making strides in the way we understand and treat neurological disorders.
The problem I'd most like to solve: Inequality. Though not engineering related or something one can tackle on his or her own, I definitely feel that the world would be a more peaceful, progressive, and beautiful place if we saw everyone as equal to ourselves.

GENEVA GOLDWOOD

Hometown: Tacoma, Wash.
Major: Mechanical Engineering
Ten years from now: I dream of working on design and implementation of biomedical devices. I like the design aspect of engineering, but I also want to work with patients.
The problem I'd most like to solve: Greed. I believe it is at the root of most other problems and if it were solved, many problems would disappear, or at least be solved more easily. But if we're talking problems that are actually solvable: cancer. It has affected the lives of many in my family and the families of my friends.