School of Environmental and Biological Sciences

2012 PROFILES

Telling our Stories
Sharing our History
Campus Community
Teaching
Research
International Study
Supporting our Students

sebs.rutgers.edu
Welcome to the School of Environmental and Biological Sciences at Rutgers, The State University of New Jersey! Here at the school, students have the opportunity to be a part of a rich academic history and a comprehensive research university while at the same time enjoying the benefits of a “small college” experience. I believe that students thrive in an environment in which they feel connected and I am deeply committed to building an experience of community among the students, staff, and faculty who call the George H. Cook Campus home.

We have a diverse student body drawn from across the U.S. and an increasing number of countries around the world. A core of renowned as well as exciting new faculty members are eager to engage you in research projects, both in and out of the classroom. The school offers a rigorous four-year General Honors Program that allows students to learn side-by-side with prominent professors in small groups and individualized study. In addition, the George H. Cook Scholars Program gives highly motivated students in their senior year a chance to do challenging research that is often a springboard to graduate study.

Our undergraduates can earn academic credit while doing part-time or full-time work in industry, government, or non-profit agencies, preparing them for the real-world. Our Office of International Programs is expanding opportunities for students to study abroad and for more international students to participate in our programs and contribute to our increasingly global community.

Take advantage of our open houses and campus tours. Meet undergraduate students who are themselves just a year or two beyond high school and who come from your city, your state, or your country. Learn their stories and the novel paths they are taking to successful professional careers and exciting lives beyond the campus.

If you are considering an undergraduate education at Rutgers, we encourage you and your family to consider the School of Environmental and Biological Sciences.
Change YOUR life here!

Students at the Rutgers School of Environmental and Biological Sciences are part of a rich history of learning, innovation, service, and community and a vital part of the top public research university that is Rutgers.

We have world-class faculty who are dynamic and creative in their approaches to teaching, in ways designed to spark students’ imaginations and fuel their passion for discovery. Generations of our graduates have gone on to be leaders in industry, academics, and public service, making lasting contributions that improve our world.

The school offers 25 undergraduate majors that prepare students for professional school (medical, dental, veterinary medicine, and law), graduate study, and positions in government, industry, business, and health care. Core classes within those majors, as well as hundreds of electives offered across the New Brunswick campus, are available to students who matriculate at the school.

At the school, we believe in balancing teaching, research opportunities, and relevant service options to offer students a complete and well-rounded education as we prepare them for citizenship and careers in a global community.

Undergraduates at the school gain hands-on experience that relates to their course of study or career interests through Student to Professional Internship Network (SPIN)—an academic program where students earn academic credit while doing part-time or full-time work in industry, government, or non-profit agencies.

For those interested in more rigorous curriculum and intellectual challenges, the school’s four-year General Honors Program allows students to learn side-by-side with renowned professors in small groups and individualized study. The George H. Cook Scholars Program is an honors thesis opportunity, designed for advanced students in their senior year.

We foster an environment that encourages leadership and values the individual. Independent study and “special problems” courses are available for highly motivated students who wish to carve out unique research opportunities. We also offer a rich menu of opportunities for out-of-classroom learning, relocation, and recreation.

Students are encouraged to take a semester, a year, or a summer abroad. The Study Abroad program offers an international experience that can transform all those who participate and start you on a path to careers you can’t yet imagine.

From the moment they step on campus, our first-year students are exposed to fascinating experiences like the Byrne Family seminars, taught by senior professors in small discussion settings. Students who live and study on the George H. Cook Campus enjoy the benefits of a close-knit community complemented by quality instruction by faculty and first-rate support from staff to help guide them in their decisions regarding education, career, and life goals.
Come join us at the School of Environmental and Biological Sciences! If you are interested in the biological world and its physical environment; if you care about the ways that humans affect this world; if you want to learn how to make a difference, then we’re the school for you.

Here at the School of Environmental and Biological Sciences, you can study how food is processed for stability and to guarantee safety, how salt and fresh water interactions within an estuary influence animal and plant distributions, or how to transform a derelict factory site into a public park. You can work with world-class scientists learning how to identify populations of microorganisms from their DNA sequences; study the availability of fresh fruits and vegetables in poor neighborhoods using geographic information systems; or launch an underwater robot on a six-month mission to cross an ocean basin.

All of our academic programs emphasize the application of knowledge to understand, predict, and thus develop multi-dimensional solutions to the complex practical problems of the 21st Century: environmental pollution, childhood obesity, climate change. Through practical study, applied research, and real-world work experience you will be prepared to be a leader in your world.

But it’s not all work. You can throw the disk on a sunny afternoon on the wide lawn above Passion Puddle, join the Seeing Eye Puppy Raising Club to help raise a service dog, volunteer at Monster Mash to provide a safe and secure Halloween experience for hundreds of children from New Brunswick, or join a club affiliated with your major, such as Designer Genes for Biotechnology majors.

Whatever your interests, if they revolve around people in the environment, the School of Environmental and Biological Sciences is for you. Come visit to learn about how you can be a part of our world.

A professor of food science, Rick Ludescher serves as the Dean of Academic Programs, responsible for the undergraduate and graduate programs of the school. He leads a core of academic deans and academic support staff serving a diverse and growing enrollment of transfer, in-state, out-of-state, and international students.
Timothy Dinh

BIOTECHNOLOGY, ’12

Timothy Dinh thinks that the “small college” setting of the School of Environmental and Biological Sciences within a large research university like Rutgers certainly made for a successful four years here. A biotechnology major, who graduated summa cum laude in 2012, Tim treasured the opportunity of being at a small school where he got to know his professors and forged a close relationship with the academic deans.

While he values this, he fully appreciates that the vast resources of a comprehensive university like Rutgers allow students to take advantage of a wide range of academic offerings and extra-curricular activities across the network of schools on the New Brunswick campus.

In addition, the inter- and multi-institutional collaborations with nearby University of Medicine and Dentistry of New Jersey and the Robert Wood Johnson Medical School help to extend the career options of students at Rutgers. Tim had the great fortune to be able to conduct research outside of Rutgers with Robert Wood Johnson Medical School professor Arnold Rabson.

“Professors at Rutgers, both within and outside of the school are amazing and my research experience, culminating in a senior honors thesis, has been one of my most influential experiences,” said Tim. While the academics at the school are great, what makes this school special to Tim is its sense of community. “The teachers, administrators, and students are extremely friendly and helpful and many of them have helped me grow and progress during my undergraduate years.”

Among his many enjoyable classes at the school, he ranks “Conservation Ecology,” taught by professor David Ehrenfeld of the Department of Ecology, Evolution, and Natural Resources, as one of his favorites. “What we learned about species conservation as well as about the conservation of culture and our planet as a whole and the steps we can take as individuals to benefit society have stayed with me. The impact of this class was very powerful.”

Timothy Dinh made full use of his four years at the school. As a freshman, he jumped right into research as a Rutgers Biotechnology Undergraduate Scholar. He sought internships, like the one at the Children’s Hospital at Robert Wood Johnson Medical School, to start building his career early as a future medical doctor. He decided to broaden his horizons, embarking on a public health summer abroad experience in Botswana, Southern Africa, where he literally took a leap in that adventure beyond the classroom, bungee jumping over the Zambezi River.
Step into history

The School of Environmental and Biological Sciences is located on the George H. Cook Campus. It’s a vital part of Rutgers University—the largest and most comprehensive public research institution in the state, with roots that date back to 1766 when New Jersey was still a colony. Originally called Queens College, it was renamed Rutgers College in honor of trustee and Revolutionary War veteran Colonel Henry Rutgers in 1825.

During the Civil War, states that remained in the union were given grants of public lands to be sold and the proceeds used to establish colleges in “agriculture and the mechanic arts.” In 1864, professor of chemistry George H. Cook successfully made the case before the NJ Legislature for Rutgers to be designated New Jersey’s “land-grant” college and it received 210,000 acres in what is now the state of Utah. The land was sold to establish the Rutgers Scientific School, with Cook at its head, and to purchase a 100-acre farm on the outskirts of New Brunswick—now the heart of the George H. Cook Campus.

The Rutgers Scientific School underwent several name changes, first to the College of Agriculture then the College of Agriculture and Environmental Science. In 1973, the school was named Cook College in honor of founder George H. Cook, who played a central role in establishing chemistry geology, engineering, and agriculture at Rutgers.

In 2007, Cook College was renamed the School of Environmental and Biological Sciences, reflecting the growing importance of the study of the environment while maintaining the school’s deep roots in agricultural science.

In the basement of Martin Hall, now the administrative hub of the school, Rutgers alumnus and professor of microbiology Selman A. Waksman helped to change the world as co-discoverer of streptomycin, the first antibiotic with widespread effectiveness against tuberculosis. Waksman was awarded the Nobel Prize in Physiology/Medicine in 1952 for his groundbreaking work in microbiology.
When you step onto the George H. Cook Campus from the downtown George Street portal, you’re stepping into history.

Students enjoy wide-open green spaces for a spontaneous game of frisbee or organized intramural and recreation activities. By far the most famous green space is the lawn at Passion Puddle. The lawn is the hub of the cherished Ag Field Day—grown into Rutgers Day—that brings current and former students back to campus for a fun time, headlined by the world’s largest egg toss and cockroach races. The centerpiece is the pond itself, the testing ground for the Rutgers glider that sailed across the Atlantic in 2009 and into the record books as the first unmanned underwater vehicle to cross an ocean basin.

Lipman Learning House, which sits on the lawn itself, and Lipman Hall just a stone’s throw away, remind us of the importance of Jacob Lipman, the first dean of agriculture in 1915, and succeeding generations of the Lipman family who have served Rutgers.

Overlooking the lawn at Passion Puddle, a stand of magnificent oak trees lends its name to Red Oak Lane—a central stop on the bus route linking the Rutgers campuses—and the time-honored tradition of oak seedlings being given to every graduating senior during the school’s graduation exercises.

Whether you live on campus or you’re a commuter, the Cook Campus Center is the main hub—the place for movie nights, arcade games, or a quiet place to hit the books. Step out of the campus center and students have their choice of visiting the Cook/Douglass Recreation Center or, if it’s a nice day, wide-open Skelley Field, home of fierce hacky sack competitions or just a place to relax.

Keeping a watchful eye over the campus is the only student-run mounted patrol unit in the nation, part of the university’s Community Security Officers Program—unpaid, uniformed student members of the Rutgers University Police Department.

The Lillian Koelsch Gazebo, donated by the Garden Club of New Jersey, was added in 2007 to the Art Rudolph Sun and Shade Garden—one of several Tribute Gardens on the nearly 180 acres of maintained and natural areas of the Rutgers Gardens. Tribute Gardens are designed as a series of “outdoor rooms” funded and built by individuals or corporate sponsors in honor of someone they know or love. The gazebo has grown into a popular location for weddings and other special occasions.
Growing minds and careers

Little did Naa Oyo Kwate know that the research experience she got as an undergraduate working with White Carneaux pigeons in Skinner boxes would be fundamental to her gift with behavioral therapies, the basis of her doctoral training in clinical psychology. Trained to diagnose and treat mental illness, she broadened her interests to overall health as a post-doc. Now, as a professor at Rutgers, she studies how different aspects of our social world affect the health of African Americans, particularly in cities.

A social scientist, Naa Oyo emphasizes critical thinking, quantitative reasoning, and hands-on research experience in small-class settings. Her courses are described as challenging and her goal is to push her students to engage rigorously with the ideas they learn. “I get to teach students and get them excited about intellectual discovery, conduct research on topics that are interesting to me, and produce scientific findings that can hopefully make the world a better place,” she says.

This kind of fulfilling experience is also available to students. Here at the school, Amelia Snow found that wonderful environment in which she thrived.

Amelia spent her first year at Rutgers as a math major in the Rutgers School of Arts and Sciences. During the spring semester of her freshmen year, she enrolled in “Introduction to Oceanography” taught by professor Kay Bidle. In the process, Amelia found her calling, eventually switching her enrollment to the School of Environmental and Biological Sciences and her major to marine sciences. By the start of her sophomore year, Amelia had the opportunity to participate in research with the Rutgers University Coastal Ocean Observation Lab—COOL Room—and spent all three years at the school working on projects that took her, literally, around the world.

Almost immediately, Amelia and fellow undergraduates were a part of the historic Atlantic crossing of an unmanned underwater vehicle, piloting the glider “Scarlet” from mission control in the COOL Room on its dramatic 221-day journey from New Jersey to Spain in 2009.

“As an undergraduate, I’ve had amazing opportunities that many graduate students never even get the chance to participate in,” says Amelia.

Amelia’s senior year took her to Antarctica on the Palmer Long Term Ecological Research project cruise, researching phytoplankton along the West Antarctic Peninsula with her research advisor, professor Oscar Schofield.
"The one thing I knew I wanted in the college I attended was an environment in which I could get to know my peers well, have relatively small classes that allowed for stimulating discussion, and where I could work closely with faculty members who were dedicated to teaching," says Naa Oyo Kwate, professor in the Department of Human Ecology. She found that at a small liberal arts college. Now a professor at a large research university like Rutgers, Naa Oyo strives to create the same rich environment for her students.
Teaching

SPARKING STUDENT INTEREST IN AND OUT OF THE CLASSROOM

Oscar Schofield

PROFESSOR

Since he was an 18-year old undergraduate on a field trip to the Sargasso Sea to conduct field research, Oscar Schofield knew that he wanted to become a professional oceanographer. The first time he gazed out over the open ocean and rode the swell aboard a research vessel, he was hooked and knew instinctively that the world was a wonderful classroom.

A professor of marine sciences at Rutgers, Oscar’s imagination was fired from that first experience and he knew that doing ocean science was, for him, an adventure both physically and intellectually. That life-altering experience has led him to an unshakable commitment to affording the undergraduate students that work in his laboratory the opportunity to have quality experiences both in and out of the traditional classroom. His students have joined him in the field to deploy robots in Arctic fjords, measure plankton productivity in the Southern Ocean, recover sensors offshore of the islands of the Gran Canarias, and map schools of fish off the coast of New Jersey.

Oscar believes that the best way to teach his students about oceanography is having them “learn by doing and by providing them life experiences about understanding our water planet.” Students who enroll in his courses also get infected by the same bug that led Oscar to become an explorer. As they learn to conduct laboratory analyses, operate ocean robots, process satellite imagery, and operate ship instruments, his students also have the adventure of a lifetime.

Professor Oscar Schofield is pictured on the back deck of the research vessel Laurence Gould, parked in the marginal sea ice zone near Charcot Island, in the waters of the West Antarctic Peninsula.

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For more than 25 years, Peter Guarnaccia, professor in the Department of Human Ecology, has been closely involved in undergraduate educational innovation at Rutgers. He’s taught first-year courses based on an early systems model for transforming education at land-grant institutions and helped develop three junior/senior colloquia for more advanced undergraduates. When Rutgers decided to make service learning a key component of the curriculum, Peter joined the core faculty working group and developed one of the first international service learning (ISL) programs, engaging students in active learning in New Jersey and abroad.

He developed and continues to be closely involved in the ISL program to engage undergraduates in community health activities in Oaxaca, Mexico. The program, now three years old, incorporates Peter’s teaching in medical anthropology and his research on Latino health in the local transnational Oaxacan community. Undergraduates in the program engage in health activities and learn medical Spanish and also have the opportunity to extend their experience during the summer in Oaxaca, Mexico.

An outstanding teacher who has been recognized by the university with a Faculty-Scholar award, Peter is deeply committed to his students. He believes in a participatory teaching style, a cornerstone of his 300-level course “Social & Ecological Aspects of Health & Disease,” in which he uses a number of small group exercises to illustrate key concepts and engage students in solving important health problems.

In the upper level course, “Health in the Latino Community,” which draws a number of students from across the New Brunswick campus because it’s cross listed with Latino, Caribbean and Hispanic Studies, Peter teaches an exciting mix of students in the social and natural sciences, many with an interest in medicine and health careers. He regularly includes guest speakers from a local community clinic and medical interpreter program and incorporates a walking tour of the Latino community focusing on health issues in the city of New Brunswick, a hands-on aspect that appeals to the undergraduates that take the course.

Peter is a dedicated mentor and he ensures that his students get the right combination of intellectual stimulation and professional development. He is committed to engaging undergraduate students in a range of service-learning activities locally and around the world. In addition to promoting international service learning activities, like his community health program in Oaxaca, Mexico, Peter is equally involved in promoting community-based research in New Brunswick, New Jersey.
Jersey Roots, Global Reach
Many fish populations around the world have been depleted by habitat loss and overfishing, requiring the intervention of experts to sustain fisheries and protect endangered fish species. From Mexico to Mongolia to Manville, New Jersey, assistant professor Olaf Jensen and students study fish to help save them. Off the coast of Baja California, Mexico, the Jensen team studies striped marlin, a top predator living in the open ocean and an exciting game fish more plentiful in this region than anywhere else on earth. By taking small tissue samples and analyzing them in the lab, the team can tell how much of the marlin’s food comes from nearby, nutrient-rich Magdalena Bay. Protecting the bay may become a higher priority if it turns out that it’s the food source for one of Mexico’s most sought-after game fish.

Weighing in at up to 200 pounds, the endangered Mongolian taimen may be the largest trout on earth but its large size won’t protect it from climate change. In the last 40 years, remote Northern Mongolia has experienced air temperature warming nearly triple the average rate of climate warming in the Northern Hemisphere. In the summers, Olaf leads a team of American and Mongolian students and scientists to the rivers of Northern Mongolia, where some of the last healthy populations of taimen remain. By tagging taimen with radio tags and tracking their movements, they can better understand the taimen’s ability to find cool water refuge in the middle of the summer heat.

Closer to home, Olaf and his students are studying the recovery of the American shad and river herring populations on the Raritan River. Recent dam removals have opened up new spawning habitat. Will this new habitat allow these depleted fish populations to recover? Put on your waders and find out!
Jeremy Feinberg  
**Ph.D. CANDIDATE**

Like generations of doctoral students, Jeremy Feinberg is driven by a passion for discovery. A doctoral candidate working in the lab of Joanna Burger, professor in the Department of Cell Biology and Neuroscience, Jeremy has concentrated his research on amphibians and reptiles, with particular interest in the general ecology and conservation of rare and uncommon species.

His Ph.D. research has focused on leopard frogs, a species group historically common throughout much of the northeast, particularly Long Island, New York. These frogs began vanishing from the island, with the last known population disappearing in the late 1990s from an otherwise pristine area at the eastern tip of the island. Using field-enclosure experiments to raise imported leopard frog tadpoles directly within actual historic wetlands on Long Island, Jeremy and fellow researchers from Rutgers, UCLA, UC Davis, and the University of Alabama began searching for possible explanations to this mystery.

In the process, Jeremy stumbled upon a completely unexpected but exciting discovery—another species of leopard frog in the New York metro area. Thought to be members of a common and wide-ranging species called the “southern leopard frog,” this species was in fact, a unique species that had never been properly recognized or identified by science. This “new,” still-unnamed species has a much smaller range than the southern leopard frog and only appears to occur along a narrow corridor running through parts of the northeast and mid-Atlantic region. Joanna called this recent discovery of a new frog in the New Jersey and New York area “an exciting collaboration” among students and faculty at Rutgers and across institutions. “The frog has been right under our noses for a hundred years and it took collaborations to discover it.”

Most new species are discovered in far off places—in tropical jungles, dense dry forest, or even remote deserts, not in the U.S., and certainly not near the bustling ports and skyscrapers of one the largest cities in the world.

Jeremy is pictured doing fieldwork at one of his research sites on Shelter Island, off of Long Island, New York. Part of his research has been looking at the effects of reed—an invasive (non-native) plant, properly known as *Phragmites australis* that has spread into many wetlands across the northeast over the past century—on developing leopard frog tadpoles that are raised in field enclosures.
Students on the George H. Cook Campus are a part of an active, diverse, multidisciplinary, and multigenerational community. They enjoy a small, tight-knit community in which they really get to know the faculty yet still enjoy the benefits of being part of a large research university.

The annual Cook/Douglass Community Day in mid-September provides an opportunity for students to learn about the many clubs, activities, and services available on campus and to share in a barbeque. They are engaged in a wide range of activities that enhance their college experience. They conduct research, for example, at the Coastal Ocean Observation Laboratory—COOL Room—and sometimes make history, as they did in 2009, “flying” a glider in the first trans-Atlantic crossing of an unmanned submersible. They raise puppies as part of the Seeing Eye Puppy Raising Club, training the puppies for eventual service as dog guides for the visually impaired. They participate in living-learning communities, like the Weather Watchers Living-Learning Community in which they broadcast weather forecasts on RU-tv. They partake in intramural athletics, leadership training, student government, and service activities like Monster Mash and Special Friends Day. Students who are members of the national honors and service fraternity of Alpha Zeta partner with local farmers to bring fresh produce to food banks.

A social hour the first Friday of each month brings faculty, staff, and students together in a casual setting. Spring and fall mixers help connect students and faculty with similar research interests and make students aware of resources available for undergraduate research.

Last year, student groups worked together with the Cook Campus Dean to bring Congressman Rush Holt to campus to discuss the importance of science literacy to a functioning democracy. They followed this with a climate communication workshop to help students learn to be more effective when using “teachable moments” to spread science literacy.

Barbara Turpin, professor of environmental sciences, serves as Campus Dean for Undergraduate Education for the George H. Cook Campus. She is committed to expanding interactions between students and faculty outside the classroom and meets regularly with students to discuss ways to make the campus an even more vibrant place to live and study.
The Weather Watchers Living-Learning Community is located at Perry Hall on the George H. Cook Campus. Students who are interested in studying meteorology have the opportunity to live with other students with the same interest. A partnership of the meteorology program at the school and RU-tv, this unique collaboration requires TV broadcasting skills offered for credit through the School of Communication and Information. These future forecasters perfect their skills in a studio located right in their dorm and air their forecasts on RU-tv for a campus audience.
Max Häggblom

PROFESSOR

The Study Abroad program offers students the opportunity to expand the classroom to locales across the globe, widening perspectives and altering lives, in ways large and small.

Among the many interesting courses available to students is “Microbiology and Culture of Cheese and Wine,” taught by professor of microbiology Max Häggblom, who also heads the Department of Microbiology and Biochemistry at the school. For two weeks in the summer, students meet in a combination of lectures, group projects, and field trips to explore the science and culture of cheese and wine manufacturing in Cluny, southern Burgundy, France. They discover how milk is fermented, curdled, and processed into cheese and how bacteria and fungi are central in this process. Naturally, they get to savor the complex tastes and aromas of the diverse cheese varieties of the region.

In 1962, then President of France Charles de Gaulle was reported to have complained, “How can you govern a country which has 246 varieties of cheese?” Today that number is closer to 500, ranking France number one globally in cheese export. France is also the world’s top producer and exporter of wine, with a tradition of viticulture going back over two and a half millennia. As part of the course, students also learn about the history of viticulture, how yeast ferments sugars to ethanol, and the complexity of the chemical and biological reactions during maturation that give wine its character.

This intensive course combines applied microbiology with the socio-economic and cultural history of southern Burgundy, one of the most pastoral and beautiful regions of France.
Ashley Wenke

BIOLOGICAL SCIENCES, ’12

For Ashley Wenke, the path to medical school and her goal to become a doctor was anything but straight. Her journey at Rutgers began in the fall of 2008, commuting between home and school. During her sophomore year, she thought she had found her niche, declaring environmental science as her major. For a while, Ashley even thought of doing marine science, spending quite a bit of time at the Institute of Marine and Coastal Sciences working on a project involving the predation of the green crab on the Atlantic Surfclam.

But, two pivotal events during Ashley’s junior year led her to switch gears. In the spring, she enrolled in “Systems Physiology,” a pre-med course dealing with body systems that was taught by Gary Merrill, professor of cell biology and neuroscience in the School of Arts and Sciences. She credits Professor Merrill with making the subject matter so clear and compelling.

Also, during that summer, Ashley signed up for the public health study abroad trip to Oaxaca, Mexico, developed by Peter Guarnaccia, professor of Human Ecology. She earned two scholarships from the school that paid for the five-week trip through the Office of International Programs, which provides scholarships for students to travel to distant locations around the globe to gain a more international perspective.

The trip to Oaxaca was Ashley’s first outside the United States. “I lived inside a bubble. I had never traveled outside the tri-state area before, let alone the country. My perspective on life was purely one dimensional and I had no idea what the world had to offer.”

In Oaxaca, Ashley worked in a local clinic, side-by-side with nurses and doctors. Within the first week, she was administering injections, taking blood pressure, heart rates, weight, and height. Occasionally the doctors allowed her to sit in on appointments. On the last week of the trip, she stood at the bedside of a woman giving birth to her first child.

Ashley decided to change her major to biological sciences during her junior year, with a minor in environmental science. As Ashley describes it, “these experiences confirmed for me that I wanted to become a doctor.”

For Ashley Wenke, faculty mentors at key parts of her undergraduate experience played an important role in shaping her interests and eventually solidified her desire to pursue a degree that would allow her to work in the medical field. Ashley recognizes just how vital it is for students to have the right influence in and out of the classroom that would help shape their futures.
Kenneth Disbrow

PUBLIC HEALTH, ’12

Kenny Disbrow, a public health major, wants to become a physician. In fact, he is pretty clear about where he wants to practice medicine—in underserved communities where health disparities are prevalent and the access to adequate health care is not always assured.

Ken considers himself privileged to be exposed to several classroom experiences as well as study abroad opportunities that helped to shape his goals. “Many of the classes I have taken incorporated learning in the classroom with community work—applying the knowledge acquired in class to real-life situations,” he says. He particularly recalls the course “International Public Health,” taught by professor Elizabeth Amaya Fernandez, and how it broadened his horizons through travel to Nicaragua. This was the beginning of several international trips that were, in effect, life-defining moments for Ken. Those experiences helped him to understand how behavior, economic status, and social justice all affect health and fueled his passion to make a difference in under-served communities.

Through Study Abroad, Ken spent a summer in Oaxaca, Mexico, on a public health initiative led by Peter Guarnaccia, professor of human ecology and expert in Latino health. Unable to afford the trip, Ken received an International Summer Scholarship from the school, thanks to the generous support of student scholarships provided by donors like Barry and Deborah Adler.
Supporting tomorrow’s leaders

Barry and Deborah Adler

DONORS

In the last year, hundreds of students at the School of Environmental and Biological Sciences received close to $700,000 in scholarships, helping to make college more affordable and supporting the dreams of future leaders in industry, medicine, and academia.

For every story of a scholarship recipient whose education was enhanced and whose confidence was boosted because of the award, there is an equally compelling story about a donor whose decision to give is as personal as it is unique. Donors like Barry and Deborah Adler who understand the value of scholarship support in the life of a young man or woman with big dreams but who may lack the funding to support their dreams.

While Barry was a student at Rutgers, his father, who had always done well providing for the family, lost everything. Barry’s father was in the egg business and when pasteurization laws were passed, almost all of New Jersey egg producers went out of business. His father struggled to find work and Barry worked alongside him to provide for the family. Barry never forgot the struggle to finish college and attend veterinary school. That is why he and his wife, Deborah, are committed to providing scholarship support to deserving students.

A few years ago Barry and Deborah established a new scholarship at the School of Environmental and Biological Sciences, with funding dedicated to supporting the international study program. They believe that students benefit from a global education and see the expansion of international study opportunities as critical to the health and vitality of the school.

They’ve taken their support one step further by investing in students like Kenny Disbrow and other undergraduate students who spend their summer or spring break travelling to other countries and enhancing their Rutgers education. You too can have the opportunity to study abroad to be a part of local projects in distant lands—community projects in agriculture, nutrition and health, the study of marine life and freshwater systems.

And, you may be one of the lucky students to receive the financial support to get you there!

Barry Adler, a 1972 graduate from the College of Agriculture and Environmental Science, and his wife Deborah believe in the value of a Rutgers education. Like many alumni and spouses, the Adlers have generously supported Rutgers, from encouraging talented students across New Jersey to attend, volunteering at alumni activities, and being advocates for a stronger Rutgers.
Devinn Lambert

BIOTECHNOLOGY, ‘13

The School of Environmental and Biological Sciences was Devinn’s first college choice. She knew coming to Rutgers, a land-grant institution, that the school stressed hands-on research and scientific training for its students. For her Biotechnology major, she feels that she got the chance to do research early on through lab courses like “Molecular Genetics,” “Plant Gene Transfer,” and “Animal Microtechniques and Tissue Culture.”

Devinn was immediately impressed with what she found on campus, an environment that promotes “learning inside and outside the classroom.” That encouraged her to join a research lab right in her freshman year. “Before college, I never saw myself being involved in research but, to my pleasure, it has been an extremely rewarding experience.” This early involvement in research prepared Devinn to conduct research on neural stem cells in Singapore during the summer of her sophomore year. Even though her work abroad was not associated with Rutgers, the school’s International Programs financially supported her research overseas.

In her junior year, Devinn won a Barry M. Goldwater Scholarship that recognized 282 students across the U.S. that year for scholastic excellence in science, engineering, and mathematics. “This award has definitely given me more confidence in my abilities and plans for the future.”

Devinn has a strong interest in molecular biology and genetic regulation and plans to pursue a Ph.D. in metabolic engineering. Her hope is to use this training to produce biofuels and other sustainable products that can reduce our energy dependency and also protect the environment.
Whether you live on campus or you’re a commuter, you can find lots to do on campus. You can check out the Cook Campus Center—the place for movie night, arcade games, or to grab a bite—or visit the Cook/Douglass Recreation Center for a workout or a swim. If it’s a nice day, the wide expanse of Skelley Field calls for a spontaneous game of hacky sack or Frisbee, or the bench outside Foran Hall can provide a quiet place to hit the books.

Choices for your future

- Agriculture and Food Systems
  - Animal Science
  - Biochemistry
- Bioenvironmental Engineering
- Biological Sciences
- Biotechnology
- Chemistry*
- Communication*
- Ecology, Evolution and Natural Resources
- Environmental and Business Economics
- Environmental Planning and Design
- Environmental Policy, Institutions, and Behavior
- Environmental Sciences
- Exercise Science and Sports Studies
- Food Science
- Genetics
- Geography*
- Geological Sciences*
- Journalism and Media Studies*
- Marine Sciences
- Meteorology
- Microbiology
- Nutritional Sciences
- Plant Science
- Public Health

* These majors require the completion of a School of Environmental and Biological Sciences minor or certificate program.
1726  Average SAT Scores
400  Student Clubs and Organizations
3,600  Undergraduate Students
25  Undergraduate Programs
12  Graduate Programs
227  On-Campus Faculty
14:1  Student-to-Faculty Ratio
8  Centers and Institutes
184  SPIN Internships

Office of Academic Programs
SUPPORTING STUDENT ASPIRATIONS

Robert M. Goodman, Executive Dean
Agriculture and Natural Resources
School of Environmental and Biological Sciences
execdean@aesop.rutgers.edu

Gail Alexander, Chief of Staff
Office of the Executive Dean
alexander@aesop.rutgers.edu

Frager F. Foster Jr., Assistant Dean
Office of Special Programs/EOF Program
frager.foster@rutgers.edu

Robert M. Hills, Associate Dean
Academic Programs
hills@aesop.rutgers.edu

Barry W. Jesse, Associate Dean
Academic Administration and Assessment
jesse@aesop.rutgers.edu

Richard D. Ludescher, Dean
Academic Programs
ludescher@aesop.rutgers.edu

Barbara Turpin, Campus Dean
George H. Cook Campus
turpin@envsci.rutgers.edu

Joseph Ventola, Assistant Dean
Academic Programs
ventola@aesop.rutgers.edu

Lily Y. Young, Dean
International Programs
lyoung@aesop.rutgers.edu
CENTERS AND INSTITUTES
Center for Environmental Prediction
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